ORDER NO. MD0306235C1

A6

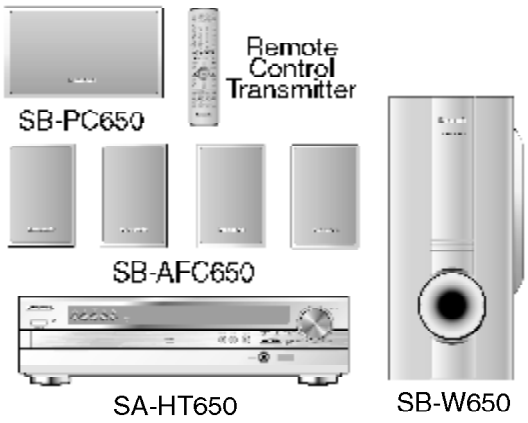
Service Manual

DVD Home Theatre Sound System

SA-HT650P

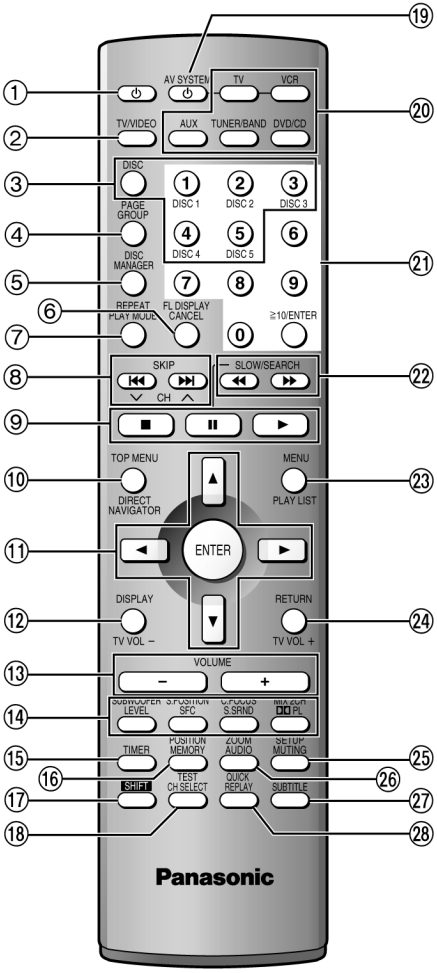
Color

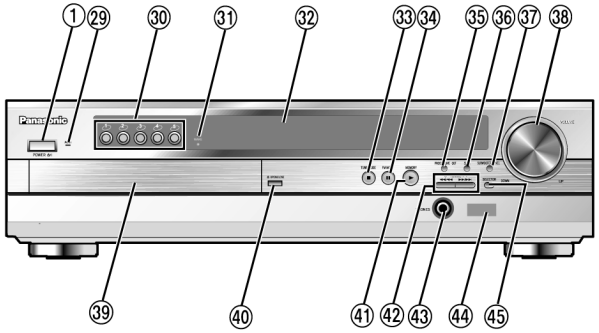
(S).....Silver Type



SPECIFICATIONS

Specifications





Remote control

① **Standby/on switch [⏻]**
② **TV/VIDEO button [TV/VIDEO]**
③ **Disc select button [DISC], Disc buttons [DISC1]–[DISC5]**
④ **Group, Page button [GROUP, PAGE]**
⑤ **Disc manager button [DISC MANAGER]**
⑥ **Cancel, FL display button [CANCEL, FL DISPLAY]**
⑦ **Play mode, Repeat button [PLAY MODE, REPEAT]**
⑧ **Skip, Preset channel, TV channel button [|◀◀ ▶▶|, SKIP, ∨ CH ∧]**
⑨ **Basic operation buttons**
⑩ **Top menu, Direct navigator button [TOP MENU, DIRECT NAVIGATOR]**
⑪ **Cursor buttons [▲, ▼, ◀, ▶], Enter button [ENTER]**
⑫ **Display, TV volume down button [DISPLAY, TV VOL–]**
⑬ **Volume buttons [–, +, VOLUME]**
⑭ **Sound field, sound quality buttons**
⑮ **Timer button [TIMER]**
⑯ **Position memory button [POSITION MEMORY]**
⑰ **Shift button [SHIFT]**
To use functions labeled in orange:
While pressing [SHIFT], press the corresponding button.
⑱ **Channel select, Test button [CH SELECT, TEST]**
⑲ **AV system standby/on button [⏻, AV SYSTEM]**
⑳ **Source select buttons**
Face towards this unit to change the source.
Press [TV] or [VCR] first to operate a Panasonic television or video cassette recorder (➡ pages 30, 31).
㉑ **Numbered buttons [1–9, 0, ≧10/ENTER]**
㉒ **Slow/search button [◀◀, ▶▶ SLOW/SEARCH]**
㉓ **Menu, Play list button [MENU, PLAY LIST]**
㉔ **Return, TV volume up button [RETURN, TV VOL+]**
㉕ **Muting, Setup button [MUTING, SETUP]**
㉖ **Audio, Zoom button [AUDIO, ZOOM]**
㉗ **Subtitle button [SUBTITLE]**
㉘ **Quick replay button [QUICK REPLAY]**

Main unit

① **Standby/on switch [POWER ⏻/I]**
Press to switch the unit from on to standby mode or vice versa.
In standby mode, the unit is still consuming a small amount of power.
㉙ **AC supply indicator [AC IN]**
This indicator lights when the unit is connected to the AC mains supply.
㉚ **Disc select buttons/indicators [DISC 1–5]**
㉛ **Wake timer indicator [WAKE]**
㉜ **Display**
㉝ **Stop, Tune mode button [■, TUNE MODE]**
㉞ **Pause, FM mode button [❚❚, FM MODE]**
㉟ **Progressive out button [PROGRESSIVE OUT]**
㊱ **Sound field control button [SFC]**
㊲ **Subwoofer level button [SUBWOOFER LEVEL]**
㊳ **Volume control [VOLUME, DOWN, UP]**
㊴ **Disc tray**
㊵ **Open/close button [⏏, OPEN/CLOSE]**
㊶ **Play, Memory button [▶, MEMORY]**
㊷ **Skip/search, Tuning buttons [|◀◀/◀◀, ▶▶/▶▶|, ∨ TUNING ∧]**
㊸ **Headphone jack [PHONES]**
㊹ **Remote control signal sensor**
㊺ **Source select button [SELECTOR]**

Decoder
A decoder restores the coded audio signals on DVDs to normal. This is called decoding.

Dolby Digital
This is a method of coding digital signals developed by Dolby Laboratories. Apart from stereo (2-channel) audio, these signals can also be multi-channel audio. A large amount of audio information can be recorded on one disc using this method.

DTS (Digital Theater Systems)
This surround system is used in many movie theaters around the world. There is good separation between the channels, so realistic sound effects are possible.

Dynamic range
Dynamic range is the difference between the lowest level of sound that can be heard above the noise of the equipment and the highest level of sound before distortion occurs.

Film and video
DVD-Videos are recorded using either film or video. Usually, film is recorded at 24 frames per second, the rate movies are filmed at, while video is recorded at 30 frames per second.

Frame still and field still
Frames are the still pictures that go together to make a moving picture. There are about 30 frames shown each second.
One frame is made up of two fields. A regular television shows these fields one after the other to create frames.
A still is shown when you pause a moving picture. A frame still is made up of two alternating fields, so the picture may appear blurred, but overall quality is high.
A field still is not blurred, but it has only half the information of a frame still so picture quality is lower.

Interlace and progressive output
NTSC, the video signal standard, has 480 interlaced (I) scan lines, whereas progressive scanning uses twice the number of scan lines. This is called 480P. The video signals output from this unit's COMPONENT VIDEO OUT terminals (Y, P_B, P_R) allow you to enjoy higher quality pictures than if the signals were output from the VIDEO OUT terminal or S-VIDEO OUT terminal.

I/P/B
MPEG 2, the video compression standard adopted for use with DVD-Video, codes frames using these 3 picture types.

I: Intra coded picture
This picture has the best quality and is the best to use when adjusting the picture.

P: Predictive coded picture
This picture is calculated based on past I or P-pictures.

B: Bidirectionally-predictive coded picture
This picture is calculated by comparing past and future I and P-pictures so it has the lowest volume of information.

Linear PCM (pulse code modulation)
These are uncompressed digital signals, similar to those found on CDs.

Playback control (PBC)
If a Video CD has playback control, you can select scenes and information with menus.

WMA, MP3, CD text and JPEG information
- Discs must conform to ISO9660 level 1 or 2 (except for extended formats).
- This unit is compatible with multi-session but if there are a lot of sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.
- The order tracks appear in the menus may differ to the order shown on your computer.

WMA
- Noise may occur when playing WMA files.
- You cannot play WMA files that are copy protected.

MP3
- This unit is not compatible with ID3 tags.
- If you play an MP3 track that includes still picture data, it will take some time before the music itself starts playing and the elapsed time will not be displayed during this time. Even after the track starts, the correct play time will not be displayed.

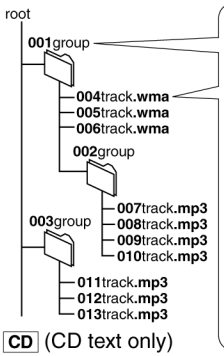
JPEG
- To view JPEG files on this unit:

— Take them on a digital camera that meets the DCF (Design rule for Camera File System) standard. Some digital cameras have functions that are not supported by the DCF standard like automatic picture rotation which may render a picture un-viewable.

— Do not alter the files in any way or save them under a different name.

- This unit cannot display moving pictures, Motion JPEG and other such formats, still pictures other than JPEG (i.e. TIFF) or play associated sound.

Order of play
WMA **MP3** **JPEG**



Naming folders and files
Prefix folder and file names with 3-digit numbers in the order you want to play them.

Extension
004track.wma (or .WMA)

The extension for MP3 is **".mp3"** or **".MP3"**.
The extension for JPEG is **".JPG"**, **".jpg"**, **".JPEG"** or **".jpeg"**.

CD (CD text only)
When making your own CD text discs
The unit plays the tracks in the order you record them so you do not have to prefix the titles with numbers.

Windows Media, and the Windows logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.

WMA is a compression format developed by Microsoft Corporation. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3.

Designed for Windows Media™

MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

■ Discs that can be played

Disc type	Logo	Indication used in instructions
DVD-RAM	DVD RAM RAM4.7	RAM
DVD-Audio	DVD AUDIO	DVD-A
DVD-Video	DVD VIDEO DVD VIDEO	DVD-V
DVD-R	DVD R R4.7	
Video CD	COMPACT disc DIGITAL VIDEO COMPACT disc SUPER VIDEO	VCD Including SVCD (Confirming to IEC62107)
CD	COMPACT disc DIGITAL AUDIO COMPACT disc DIGITAL AUDIO TEXT	CD Including CD text
CD-R/RW	—	WMA MP3 JPEG

- Use discs with the above logos and that conform to specifications. The unit cannot play other discs correctly.
- Do not use irregularly shaped discs (e.g. heart-shaped), as these can damage the unit.

■ Discs that cannot be played

PAL discs (except DVD-Audio), DVD-ROM, CD-ROM, CDV, CD-G, +RW, DVD-RW, SACD, Divx Video Discs, Photo CD and “Chaoji VCD” available on the market including CVD, DVCD and SVCD that do not conform to IEC62107.

■ Disc structure

Disc structure and the labels given to the items on discs depend on the disc type.

Track: the smallest division on DVD-Audio, CDs and Video CDs, or a single WMA/MP3 file.
Chapter: the smallest division on DVD-Video.
Group: collections of tracks on DVD-Audio and equivalent to folders or albums on data discs.
Title: the largest division on DVD-Video, usually an entire movie.
Program: the division on DVD-RAM equivalent to a single recording.
Picture: a single JPEG file.
Play list: the largest grouping on a HighMAT disc, or a group of scenes on DVD-RAM.
Scene: DVD-RAM program sections specified and grouped into play lists on a DVD video recorder.
Content: covers tracks and pictures on HighMAT discs.

Playing DVDs and Video CDs

The producer of these discs can control how they are played so you may not always be able to control play as described in these operating instructions (for example if the play time is not displayed or if a Video CD has menus). Read the disc’s instructions carefully.

■ DVD-RAM discs

DVD-RAM discs must meet the following conditions for this unit to be able to play them.

Type	●Non-cartridge discs ●Discs that can be removed from their cartridges (TYPE 2 and 4)
Capacity	●12 cm (5″) 9.4 GB (double-sided) and 4.7 GB (single-sided) ●8 cm (3″) 2.8 GB (double-sided)
Recording format	Discs recorded with DVD video recorders, DVD video cameras, personal computers, etc., using Version 1.1 of the Video Recording Format (a unified video recording standard).

- Remove TYPE 2 and 4 discs from their cartridges before use, then return them when you are finished. Read the instructions for the disc carefully.
- Do not allow the disc to become dirty or scratched. Store discs in their cartridges and ensure the disc label and cartridge label face the same way.
- Some parts of the disc, for example where one program ends and another begins, may not play smoothly.

■ DVD-R discs

Panasonic DVD-R recorded and finalized on a Panasonic DVD video recorder are played as DVD-Video on this unit.

■ CD-R and CD-RW discs

This unit can play CD-R/RW (audio recording disc) recorded with CD-DA, video CD, SVCD (conforming to IEC62107), WMA, MP3 or JPEG. Close the sessions or finalize the disc after recording.

■ HighMAT discs

This unit is compatible with HighMAT discs containing WMA, MP3, and/or JPEG files.

Note

It may not be possible to play CD-R, CD-RW, DVD-R and DVD-RAM in all cases due to the type of disc or condition of the recording.

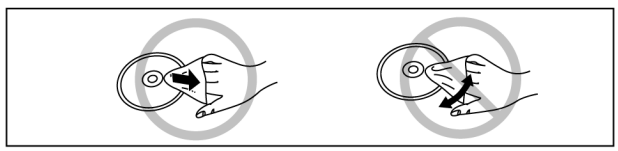
■ Playing PAL system DVD-Audio

This unit converts PAL to NTSC for play. The picture is compressed to show it in its entirety, but this may cause it to be stretched vertically.

■ To clean discs

DVD-Audio, DVD-Video, Video CD, CD

Wipe with a damp cloth and then wipe dry.



DVD-RAM, DVD-R

- Clean with an optional DVD-RAM/PD disc cleaner (LF-K200DCA1, where available).
- Never use cloths or cleaners for CDs etc.

■ Handling precautions

- Do not write on the label side with a ball-point pen or other writing instrument.
- Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
- Do not attach labels or stickers to discs. (Do not use discs with exposed adhesive from tape or left over peeled-off stickers.)
- Do not use scratch-proof protectors or covers.
- Do not use discs printed with label printers available on the market.

HighMAT and the HighMAT logo are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

Manufactured under license from Dolby Laboratories. “Dolby”, “Pro Logic” and the double-D symbol are trademarks of Dolby Laboratories.

Manufactured under license from Digital Theater Systems, Inc. US Pat. No. 5,451,942, 5,956,674, 5,974,380, 5,978,762 and other world-wide patents issued and pending. “DTS” and “DTS Digital Surround” are registered trademarks of Digital Theater Systems, Inc. Copyright 1996, 2000 Digital Theater Systems, Inc. All rights reserved.

AMPLIFIER SECTION

RMS Output Power: Dolby Digital Mode, 10% Total Harmonic Distortion

1 kHz Front CH	46 W per channel (6 Ω)
1 kHz Surround CH	56 W per channel (6 Ω)
1 kHz Center CH	106 W per channel (6 Ω)
100 kHz Subwoofer CH	190 W per channel (6 Ω)
Total RMS Dolby Digital Mode Power	500 W

FTC Output Power: Dolby Digital Mode, 1.0% Total Harmonic Distortion

120 Hz-20 kHz Front CH	30 W per channel (6 Ω)
120 Hz-20 kHz Surround CH	38 W per channel (6 Ω)
120 Hz-20 kHz Center CH	80 W per channel (6 Ω)
45 Hz-120 Hz Subwoofer CH	144 W per channel (6 Ω)
Total FTC Dolby Digital Mode Power	360 W

Input sensitivity/input impedance

AUX	250 mV, 10 k Ω

FM TUNER SECTION

Frequency range	87.9-107.9 MHz / (200 kHz-step)
	87.5-108.0 MHz / (100 kHz-step)
Antenna terminals	75 Ω (unbalanced)
Preset station	12

AM TUNER SECTION

Frequency range	520-1710 kHz / (10 kHz-step)
AM Sensitivity S/N 20 dB at 1000kHZ	560 μV/m
Preset station	12

DISC SECTION

Discs played [8 cm (3”) or 12 cm (5”)]

- (1) DVD-RAM (DVD-VR formatted disc)
- (2) DVD-Audio
- (3) DVD-Video
- (4) DVD-R (DVD-Video formatted)
- (5) CD-Audio (CD-DA)
- (6) Video CD
- (7) SVCD (Conforming to IEC62107)

(8) CD-R/CD-RW (CD-DA, Video-CD formatted disc)

(9) MP3/WMA

- Maximum number of tracks and groups recognizable: 999 tracks and 99 groups
- Compatible compression rate: / MP3: between 32 kbps and 320 kbps / WMA: between 48 kbps and 192 kbps

(10) JPEG

- Exif Ver 2.1 JPEG Baseline files
- Maximum number of pictures and ground recognizable: 3000 pictures and 300 groups
- Picture resolution: between 320 x 240 and 6144 x 4096 pixels (Sub sampling is 4:2:2 or 4:2:0)

(11) HighMAT Level 2 (Audio and Image)

Video	
Signal system	NTSC
Output level	
Composite video	1 Vp-p (75 Ω)
S-video	
Y	1 Vp-p (75 Ω)
C	0.286 Vp-p (75 Ω)
Component video (Y: green, PB: blue, PR: red)	
Y output level	1 Vp-p (75 Ω)
PB output level	0.7 Vp-p (75 Ω)
PR output level	0.7 Vp-p (75 Ω)
Audio	
Sampling frequency	
CD	44.1 kHz
MP3	44.1 kHz, 48 kHz
DVD (Linear Audio)	48 kHz, 96 kHz
DVD-Audio	192 kHz
Decoding	16/20/24 bit linear
Number of channels	5.1 ch (FL, FR, SL, SR, C, SW)
Frequency response	20 Hz-20 kHz (+1, -2 dB
Pick up	
Beam Source	Semiconductor Laser
Wavelength	
CD/VCD	780 nm
DVD	658 nm
Wow and flutter	Less than possible measurement data

D/A converter	Delta sigma DAC
■ GENERAL	
Power supply	AC 120 V, 60 Hz
Power consumption	190 W
Dimensions (W × H × D)	430 × 114 × 368 mm (16 15/16” × 4 1/2” × 14 1/2”)
Mass	8.2 kg (18.1 lb.)
■ SYSTEM	
SC-HT650P	Main unit: SA-HT650P
	Speaker System: SB-HT650P
	Subwoofer System: SB-W650P
Power consumption in standby mode (approx)	0.5 W

Notes:

1. Specifications are subject to change without notice. Mass and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

© 2003 PANASONIC AVC Networks Singapore Pte. Ltd. All rights reserved. Unauthorized copying and distribution is a violation of law.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

1. SAFETY PRECAUTIONS

1.1. GENERAL GUIDELINES

1. When servicing. observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to

prevent the customer from being exposed to shock hazards.

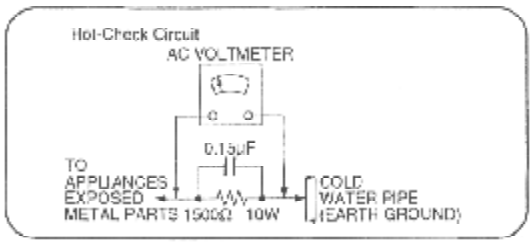
(This “Safety Precaution” is applied only in U.S.A.)

1. **Before servicing, unplug the power cord to prevent an electric shock.**
2. **When replacing parts, use only manufacturer’s recommended components for safety.**
3. **Check the condition of the power cord. Replace if wear or damage is evident.**
4. **After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.**
5. **Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.**

1.1.1. LEAKAGE CURRENT COLD CHECK

1. **Unplug the AC cord and connect a jumper between the two prongs on the plug.**
2. **Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis,the reading should be between 1MΩ and 5.2Ω. / When the exposed metal does not have a return path to the chassis, the reading must be ∞.**

Fig. 1



1.1.2. LEAKAGE CURRENT HOT CHECK (See Figure 1.)

1. **Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.**

2. **Connect a 1.5kΩ, 10 watts resistor, in parallel with a 0.15 μF capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.**
3. **Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.**
4. **Check each exposed metallic part, and measure the voltage at each point.**
5. **Reverse the AC plug in the AC outlet and repeat each of the above measurements.**
6. **The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/ 2 milliamp. In case a measurement is outsideof the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.**

2. Handling the Lead Solder

2.1. About lead free solder (PbF)

Distinction of PbF P.C.B. :
P.C.B.s (manufactured) using lead free solder will have a PbF stamp on the P.C.B.
Caution:

- **Pb free solder has a higher melting point that standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. / Please use a high temperature soldering iron. In case of the soldering iron with temperaturecontrol, please set it to 700 ± 20°F (370 ± 10°C).**
- **Pb free solder will tend to splash when heated too high (about 1100°F/600°C).**
- **When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.**

3. Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C527, C528, C529, C530, C561 through a 10 Ω, 10 W resistor to ground.
DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may

destroy solid state devices.
After repairs are completed, restore power gradually using a variac, to avoid overcurrent.
Current consumption at AC 120V, 60Hz in NO SIGNAL mode should be 850 mA .

4. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.

- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are
"shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.
If this occurs, follow the procedure outlines below:

1. Turn off the power.

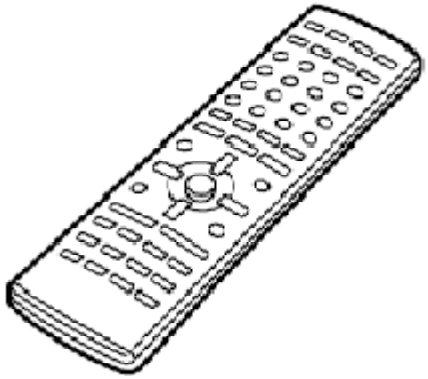
2. Determine the cause of the problem and correct it.

3. Turn on the power once again after one minute.

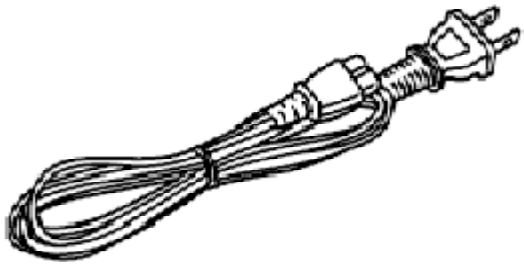
Note :
When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

5. Accessories

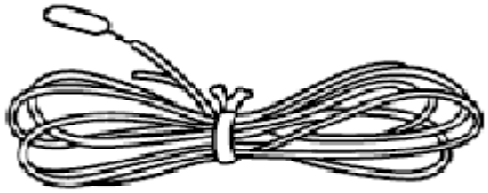
Remote control



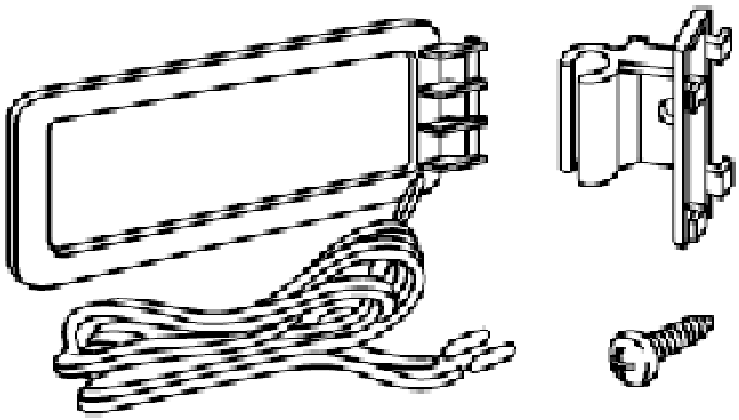
AC power supply cord



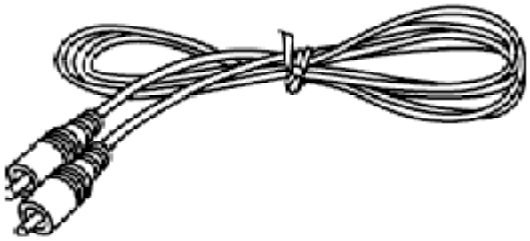
FM indoor antenna



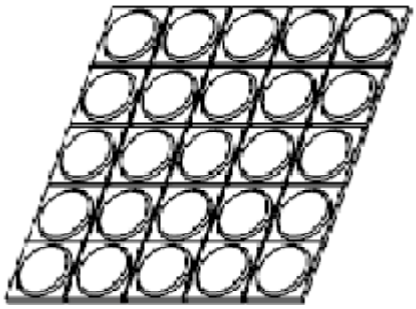
AM loop antenna set



Video cable



Sheet of speaker feet



6. Operation Procedures

7. Disc information

8. About HighMAT

8.1. What is HighMAT?

This word combines the abbreviations of Matsushita Electric Industrial Co., Ltd. and High Performance Media Access Technology, and is a trademark of Microsoft Corporation. The

products with the HighMAT logo shown below are made according to theHighMAT standard.

Level 1 Level 2 Level 3

HighMat is a format that allows users to save digital contents such as photographs, audio and images on a CD. This gives consistency in the way of reading data when general consumer products (such as DVD players) and PCs are used, and thus, it iseasy to operate for the user.

8.2. Why use HighMAT?

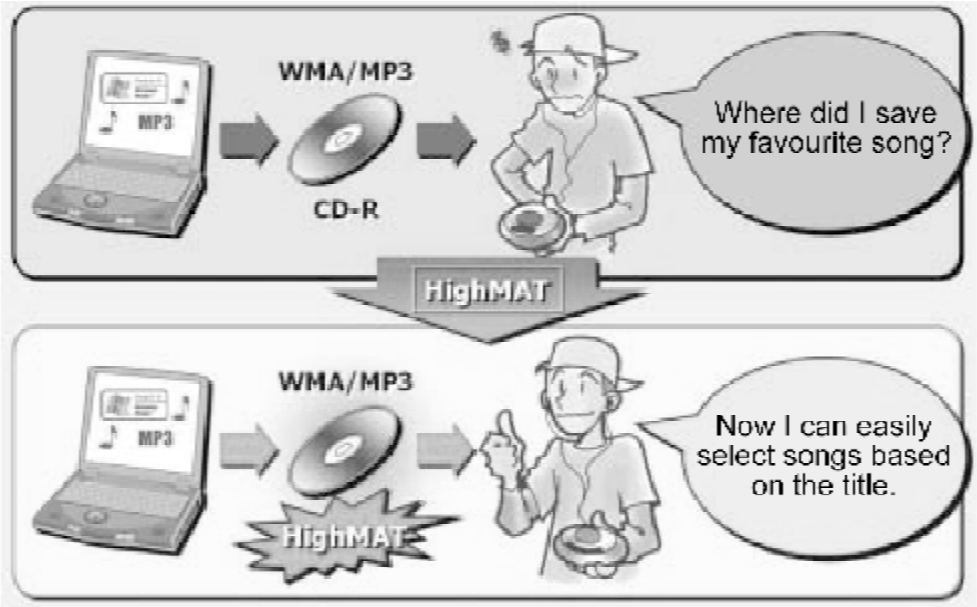
Up to now, there was no harmonized standard from playing digital content stored in CD-ROM formats (including CD-R) on consumer products like DVD players. Therefore, we used to have problems such as follow:

- **There was no common play list or attached information on contents, which is called metadata.**
- **The data compression method differed according to the equipment.**
- **As the number of CD-ROMs recorded increased retrieved the contents became more difficult.**
- **Because display and operation methods were different depending on the equipment, the play order of the content on the same disc could change.**

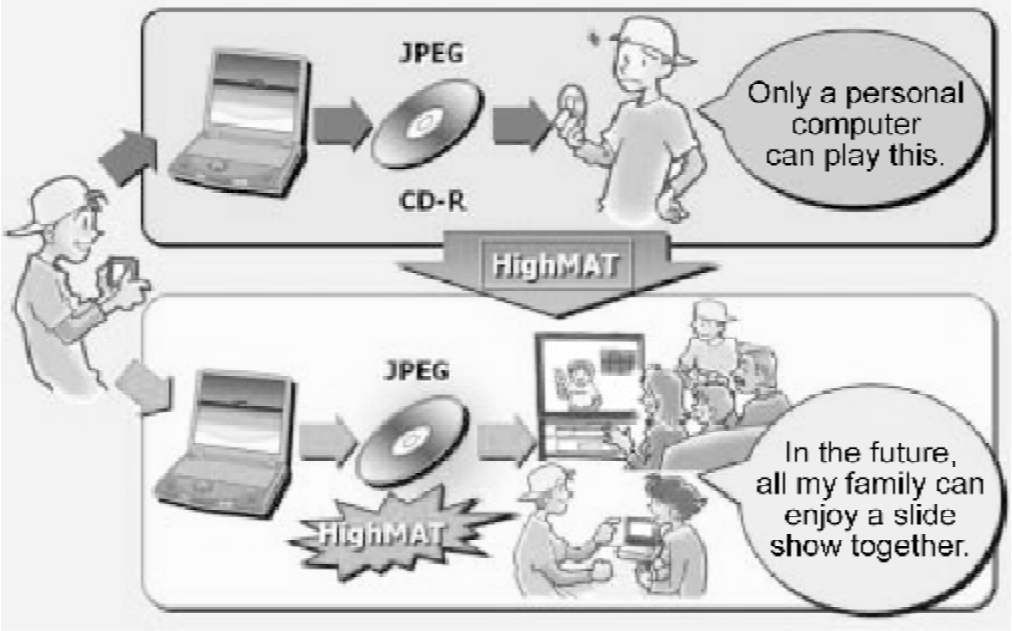
8.3. The advantages of using HighMAT

Applying the HighMAT standard will solve the following problems and will improve usability.

- **It will create a common user interface for both PC and consumer products.**



- Regardless of the types of consumer products, such as DVD players, portable CD players, car stereos and minicomputers, a consistent way to play for digital content will be created, and it will make it easier to retrieve data.

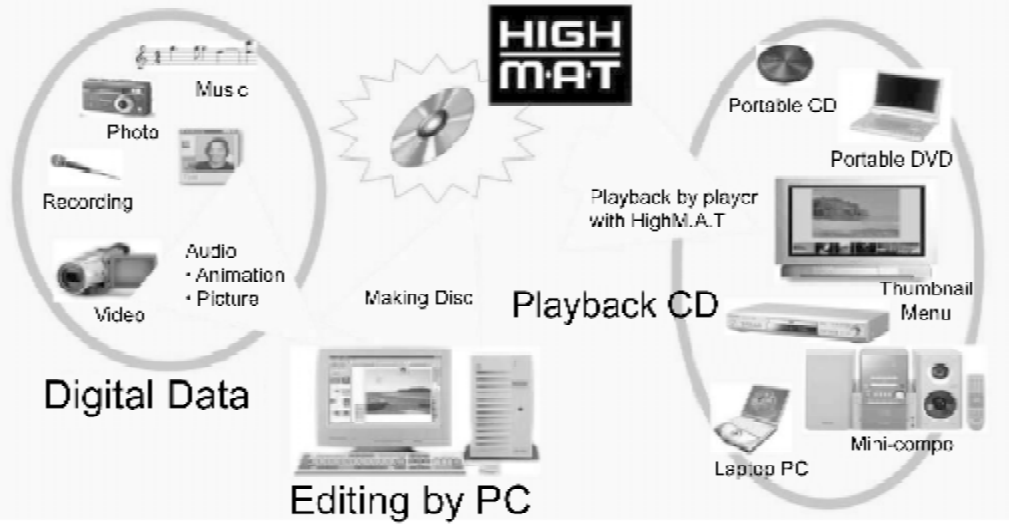


- You can also play digital content on the disc, which was created in accordance with the HighMAT format with a conventional CD-ROM player.

8.4. Outline of the HighMAT standard

1. Recording medium

- **CD-R/CD-RW**
- **Supports ISO 9660 Level Expanded Joliet**
- **For multiple session**



2. Support data format

- **Level 1 player: WMA, MP3 (MPEG-1 Audio Layer 3)**
- **Level 2 player: WMA, MP3 (MPEG-1 Audio Layer 3), JPEG**
- **Level 3 player: WMA, MP3 (MPEG-1 Audio Layer 3), JPEG, WMV, MPEG4 (optional)**

3. Limitation of data format

- **WMA, MP3 (MPEG-1 Audio Layer 3) 64 kbps - 160.999 kbps, 44.1 kHz, stereo, fixed bit rate/variable bit rate.**
- **WMA, V2 and above, excluding Lossless/Voice/Pro**
- **JPEG: Max 6M pixel, Maximum file size: 3 MB**

4. Limitations regarding the number of files on the media, etc.

- **Total number of audio files: Maximum 450**
- **Total number of still picture files: Maximum 999**
- **Total number of animation files: Maximum 200**
- **Total number of directories: Maximum 400**
- **Length of a file name: Maximum 108 characters (Unicode)**
- **Total number of play lists: Maximum 200**
- **Number of contents in the playlist: Maximum 900**

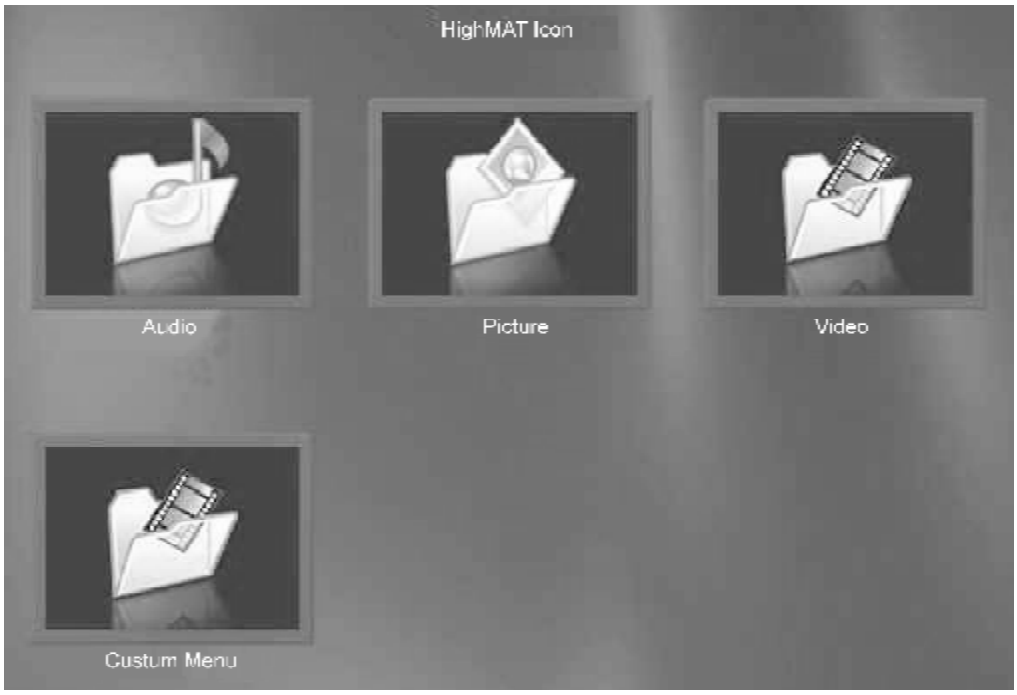
5. Composition of HighMAT disc

- **Menu: Classified for the navigation of the HighMAT digital contents. When menu selected, its submenu or the play list will be displayed.**
- **Play list: A list in which one or more digital contents are arranged**

in order.

- Group: Sub-divided group of a play list.

- Digital Contents: Audio, still picture and animation data.



9. Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistorsand semiconductor “chip” components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. **Immediately before handling any semiconductor component or semiconductor-equiped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, whichshould be removed for potential shock reasons prior to applying power to the unit under test.**
2. **After removing an electrical assembly equiped with ES devices, place the assembly on a conductive surface such as aluminium foil, to prevent electrostatic charge build up or exposure of the assembly.**
3. **Use only a grounded-tip soldering iron to solder or unsolder ES**

devices.

4. Use only an anti-static solder remover device. Some solder removal devices not classified as “anti-static (ESD protected)” can generate electrical charge to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminium foil orcomparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD)sufficient to damage an ES device).

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety.
These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

10. Precaution of Laser Diode

CAUTION :

This unit utilizes a class 1 laser.
Invisible laser radiation is emitted from the optical pickup lens.
When the unit is turned on :

1. Do not look directly into the pick up lens.
2. Do not use optical instruments to look at the pick up lens.

3. Do not adjust the preset variable resistor on the pickup lens.
4. Do not disassemble the optical pick up unit.
5. If the optical pick up is replaced, use the manufacturer's specified replacement pick up only.
6. Use of control or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN TH
SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

CAUTION – LASER RADIATION WHEN OPEN
DO NOT STARE IN TO BEAM FDA 21 CFR / Class II
CAUTION – VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN.
AVOID EXPOSURE TO BEAM IEC60825-1 / Class 3a
VARNING – SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR
ÖPPNAD BETRAKTA EJ STRÅLEN
ADVARSEL – SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING.
UNDGÅ UDSÆTTELSE FOR STRÅLING
ADVARSEL – SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES.
UNNGÅ EKSPONERING FOR STRÅLEN.
VARO! AVATTAESSA OLET ALTTIINA NÄKYVÄÄ JA NÄKYMÄTÖN
LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VORSICHT – SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG, WENN
ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN
ATTENTION – RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS
D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU
注意 – 打开时有可见及不可见激光辐射，避免激光束照位。
注意 – ここを開くと可視及び不可視レーザー光が出ます。
ビームを見たり、触れたりしないで下さい。 RCLX50054

(Inside of product)

11. Handling Precaution for Traverse Deck (Optical Pickup)

The laser diode in the traverse unit (optical pickup) may break down due to static electricity of clothes or human body.
Use due caution to electrostatic breakdown when servicing and handling the laser diode.

11.1. Grounding for electrostatic breakdown prevention

Some devices such as the DVD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

11.1.1. Workable grounding

1. Put a conductive materials (sheet) or iron sheet on the area where the optical pickup is placed, and ground the sheet.

11.1.2. Human body grounding

1. **Use the anti-static wrist strap to discharge the static electricity from your body.**

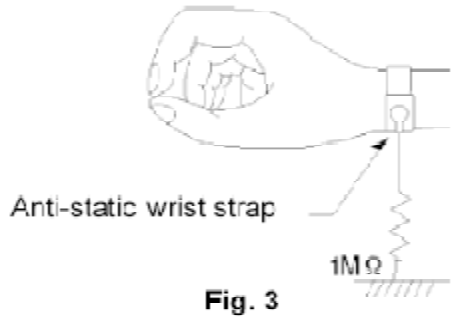


Fig. 3

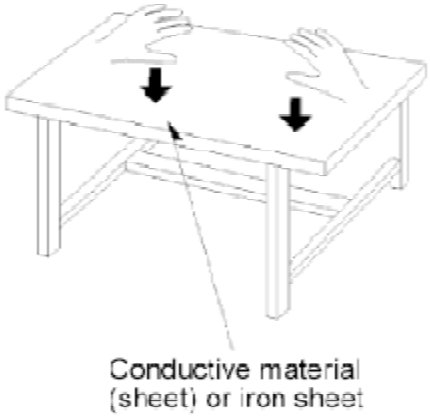


Fig. 4

11.1.3. Handling of optical pickup

1. **To keep the good quality of the optical pickup maintenance parts during transportation and before installation,. the both ends of the laser diode are short-circuited. After replacing the parts with new ones, remove the short circuit accordingto the correct procedure. (See this Technical Guide.)**
2. **Do not use a tester to check the laser diode for the optical pickup. Failure to do so will damage the laser diode due to the power supply in the tester.**

11.2. Handling Precautions for Traverse Unit (Optical Pickup)

1. **Do not give a considerable shock to the traverse unit (optical pickup) as it has an extremely high-precise structure.**
2. **When replacing the optical pickup, install the flexible cable and cut its short land with a nipper. See the optical pickup replacement procedure in this Technical Guide. Before replacing the traverse unit, remove the short pin for preventingstaticelectricity and install a new unit. Connect the connector as short times as possible.**
3. **The flexible cable may be cut off if an excessive force is applied to it. Use caution when handling the cable.**

4. The half-fixed resistor for laser power adjustment cannot be adjusted. Do not turn the resistor.

12. Disassembly and Main Component Replacement Procedures

“ATTENTION SERVICER”

Some chassis components may have sharp edges.
Be careful when disassembling and servicing.

1. This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.
2. For reassembly after operation checks or replacement, reverse the respective procedures.
   Special reassembly procedures are described only when required.
3. Select items from the following index when checks or replacement are required.

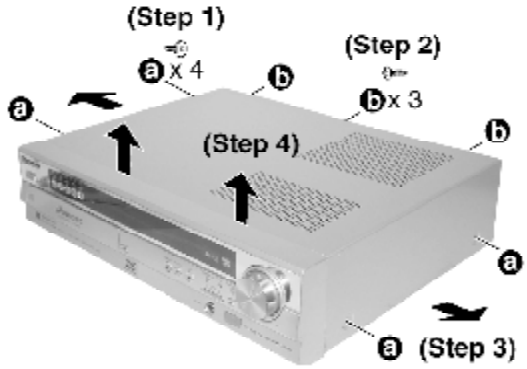
Contents

- Checking for DVD B/E Module (1/2) and Power P.C.B.
- Checking for Panel P.C.B. and Switch P.C.B.
- Checking for DVD Module (1) P.C.B., CD Loading P.C.B., ASP P.C.B., DSP P.C.B. and Input P.C.B.
- Checking for DVD REG P.C.B.
- Checking for Main P.C.B.
- Replacement of the Power IC
- Replacement of DVD Traverse Unit
- Replacement for the disc tray
- Disassembly and reassembly for mechanism base drive unit
- Replacement for the motor ass’y

Warning:

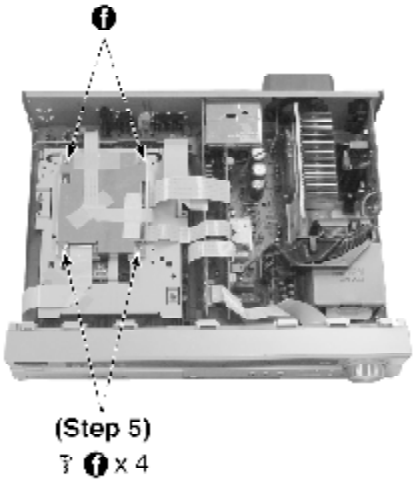
This product uses a laser diode. Refer to caution statement Precaution of Laser Diode.

12.1. Checking for DVD B/E Module (1/2) and Power P.C.B.

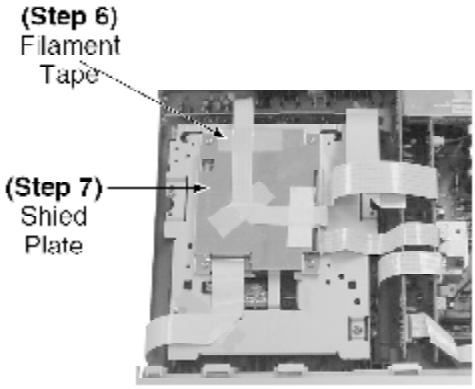


Step 1 & 2 : Remove all the screws.
Step 3 : Slightly spread open both sides of the cabinet before lifting it upwards to remove.
Step 4 : Remove the top cabinet.

- Carry out the check for Power P.C.B. as per condition indicated in diagram shown below.

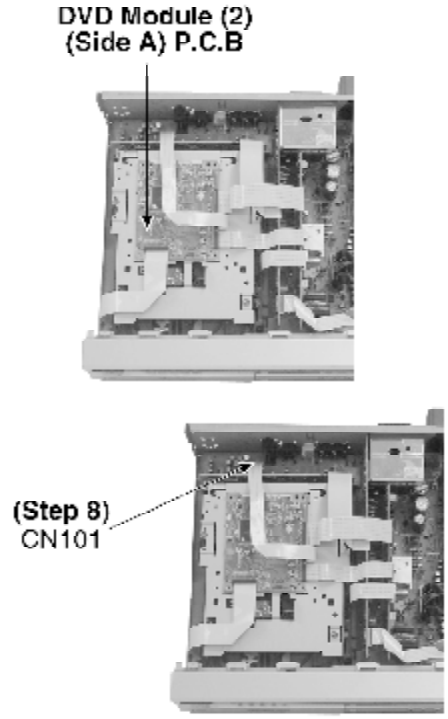


Step 5 : Remove all the screws.



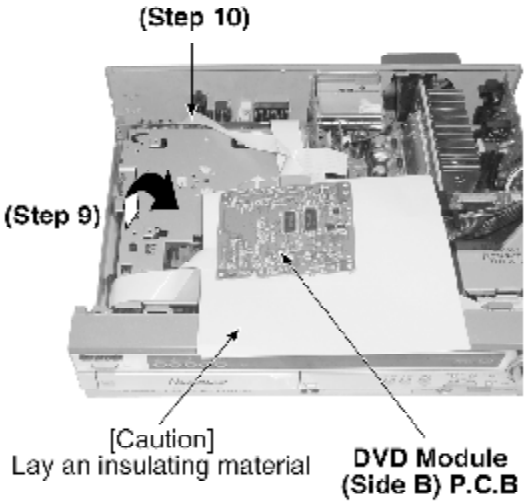
Step 6 : Remove all the Filament Tape.
Step 7 : Remove all the Shied Plate.

- Carry out the check for DVD Module (2) - (Side A) P.C.B. as per condition indicated in diagram shown below



Step 8 : Remove FFE (CN101) as diagram shown below.

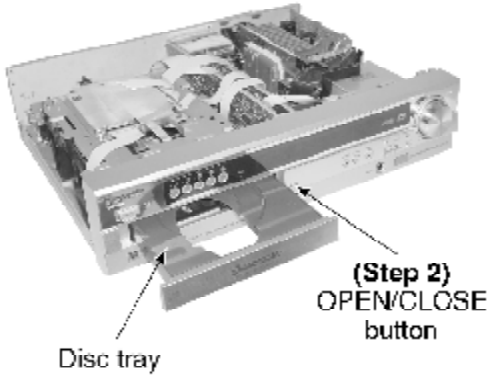
- Carry out check for DVD Module (1) - (Side B) P.C.B. as per condition in diagram as shown below.



Step 9 : Turn over DVD Module (2) - (Side B) as diagram shown below.
Step 10 : Connect back FFC (CN101).

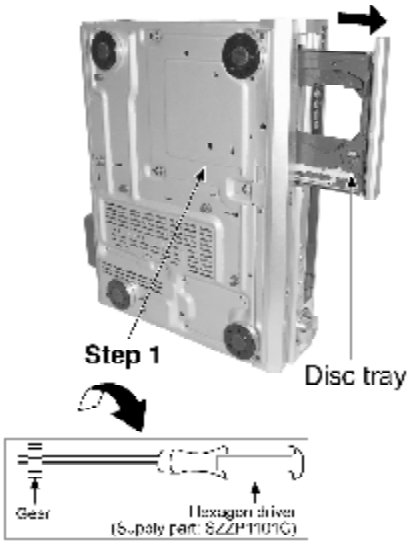
12.2. Checking for Panel P.C.B. and Switch P.C.B.

*** Repeat Step 1 to 4 of item 12.1**
[When opening electrically]

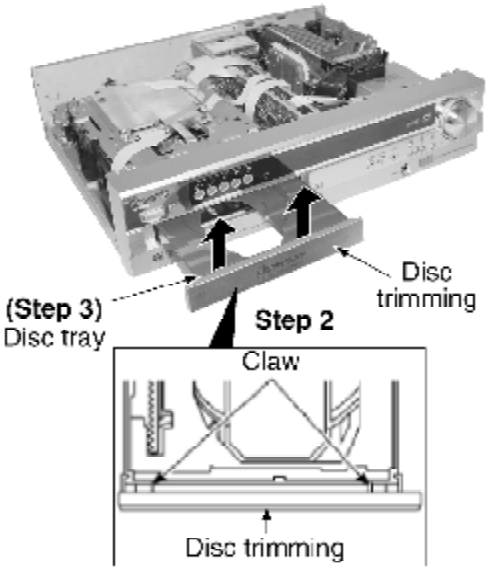


Step 1 : Connect the AC cord and turn on the power supply.
Step 2 : Press OPEN/CLOSE button to open the disc tray.

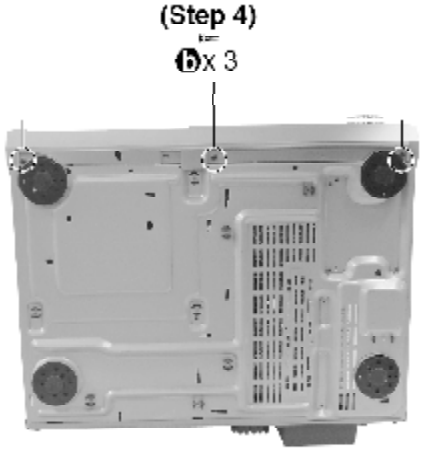
[When opening manually]



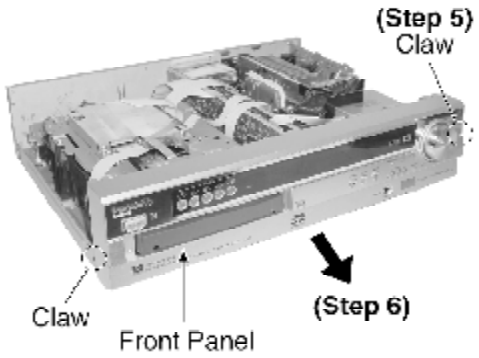
Step 1 : Insert the hexagon driver (gear bit) into the hole at the bottom face of the main body and turn it in the direction of the arrow to open the disc tray.



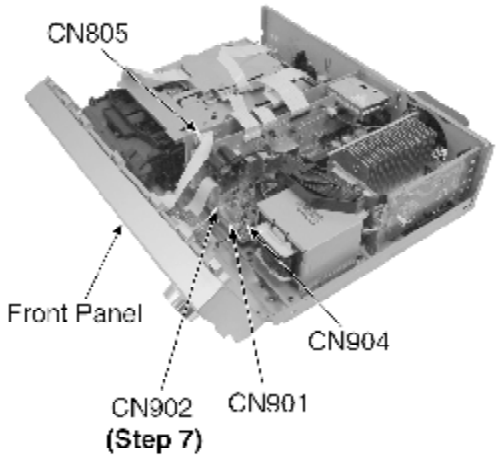
Step 2 : Release claw at 2 locations and remove tray trimming.
Step 3 : After removing the tray trimming, push the disc tray back inside the main unit.



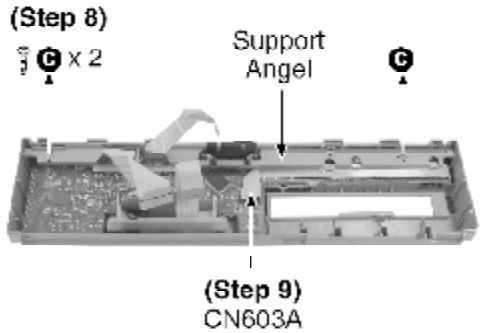
Step 4 : Remove all the screws.



Step 5 : Release claw at 2 locations and pull out the front panel.
Step 6 : Slightly pull out the Front Panel as arrow shown below. .

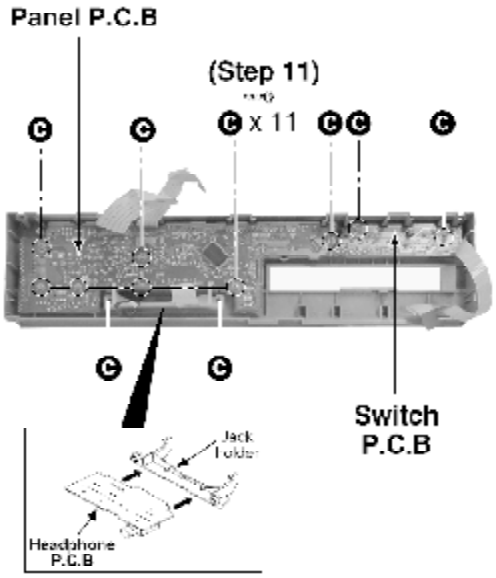


Step 7 : Disconnect all the FFC (CN805, CN902, CN901 and CN904) and remove the front panel.



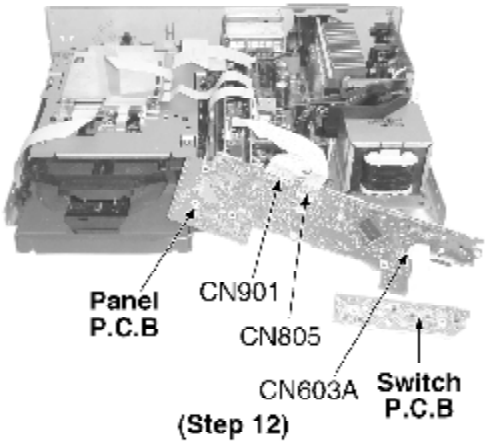
Step 8 : Remove all the screws and Support Angel.
Step 9 : Remove FFC (CN603A).

Step 10 : Remove the Volume Knob from Front Panel.



Step 11 : Remove all the screws.

- Carry out checks with Switch P.C.B. and Panel P.C.B. in the condition as indicated in diagram below

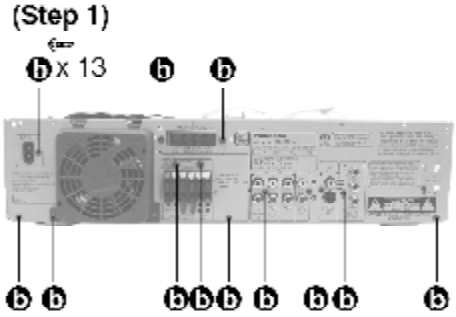


Step 12 : Reconnect back all FFC (CN805, CN901 and CN603A).

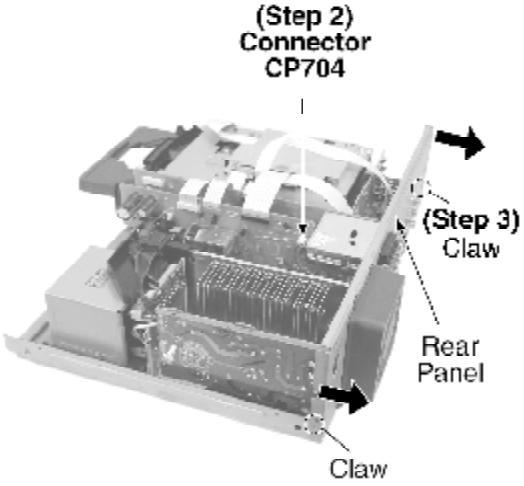
12.3. Checking for DVD Module (1) P.C.B., CD Loading P.C.B., ASP P.C.B., DSP P.C.B. and Input P.C.B.

*** Repeat Step 1 to 4 of item 12.1**

*** Repeat Step 1 to 7 of item 12.2**

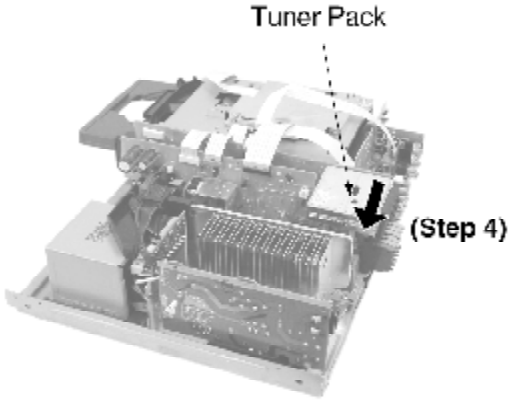


Step 1 : Remove all the screws.

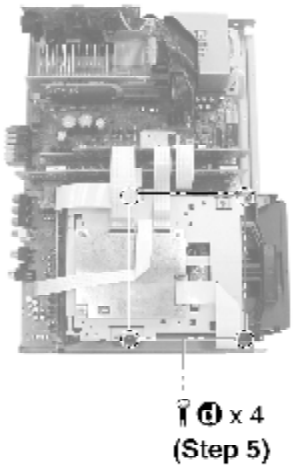


Step 2 : Unplug the connector (CP704).

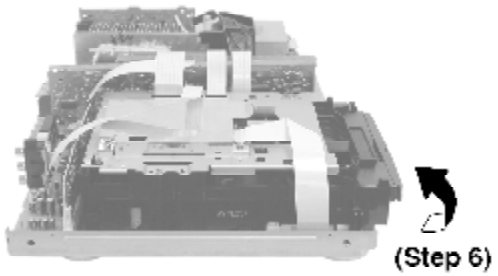
Step 3 : Remove claw at 2 locations and detach the rear panel as shown above.



Step 4 : Remove the Tuner Pack as arrow shown above.

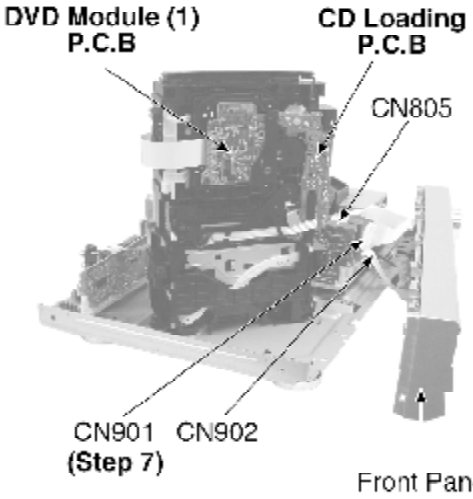


Step 5 : Remove all the screws.



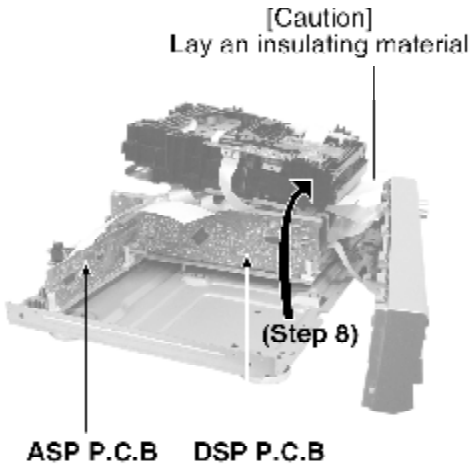
Step 6 : Flip over the DVD F/E Module loading unit as arrow shown above.

- Carry out checks with CD Loading P.C.B. and DVD Module (1) P.C.B. in the condition as indicated in diagram below

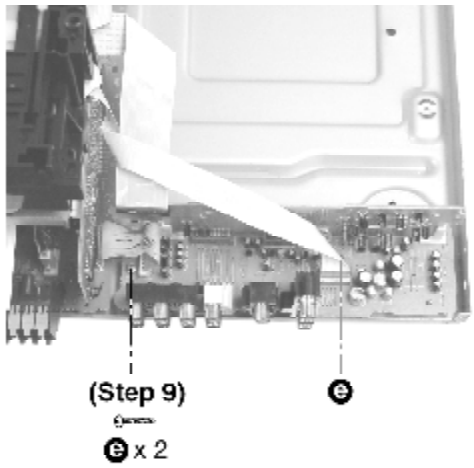


Step 7 : Reconnect back all the FFC (CN805, CN901 and CN902) from Front Panel.

- Carry out checks with ASP P.C.B. and DSP P.C.B. in the condition as indicated in diagram below

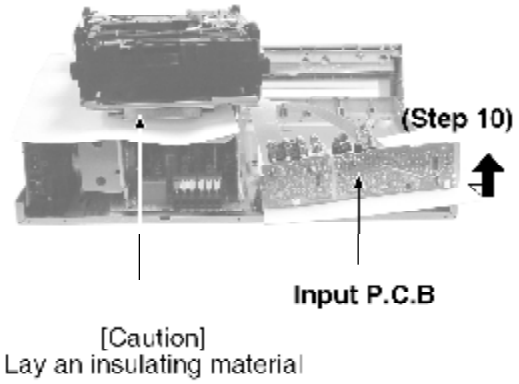


Step 8 : Flip over the DVD F/E Module loading unit as arrow shown above.



Step 9 : Remove all the screws.

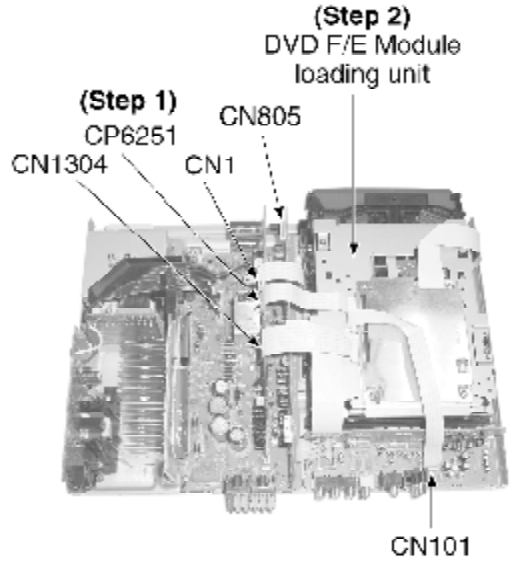
- Carry out checks with Input P.C.B. in the condition as indicated in diagram below



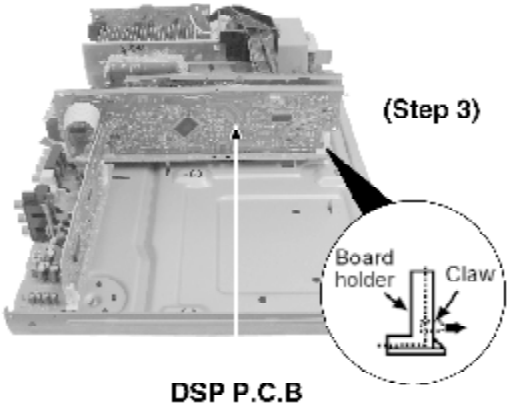
Step 10 : Flip over the Input P.C.B. as arrow shown above.

12.4. Checking for DVD REG P.C.B.

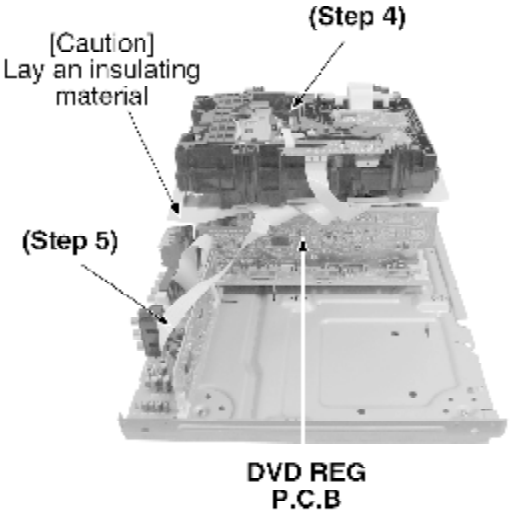
*** Repeat Step 1 to 4 of item 12.1**
*** Repeat Step 1 to 7 of item 12.2**
*** Repeat Step 1 to 4 of item 12.3**



Step 1 : Remove all the FFC (CN805, CN1, CP6251, CN1304 and CN101).
Step 2 : Remove the DVD F/E Module loading unit.



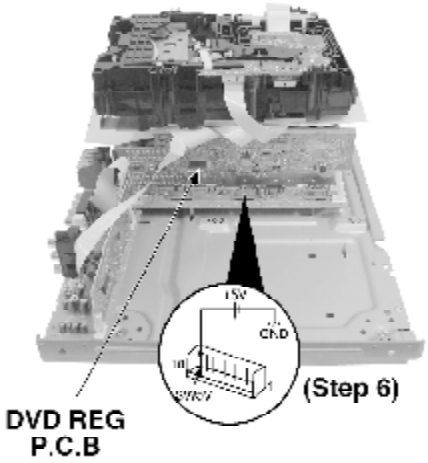
Step 3 : Detach DSP P.C.B. while removing tab on board holder.



Step 4 : Position the DVD F/E Module loading unit as diagram shown above.
Step 5 : Reconnect back all the FFC (CN805, CN1, CP6251, CN1304 and CN101).

- Carry out checks with DVD REG P.C.B. in the condition as

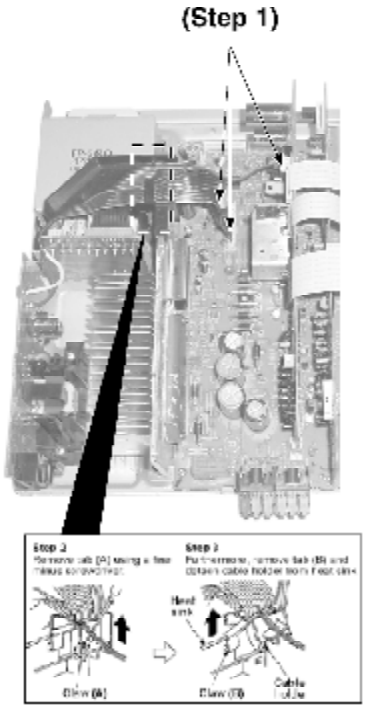
indicated in diagram below



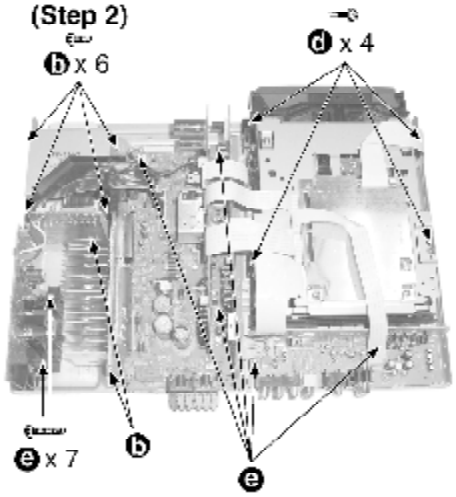
Step 6 : Supply +5V from external power source to pin 10 terminal of connector (CP801) on main board.

12.5. Checking for Main P.C.B.

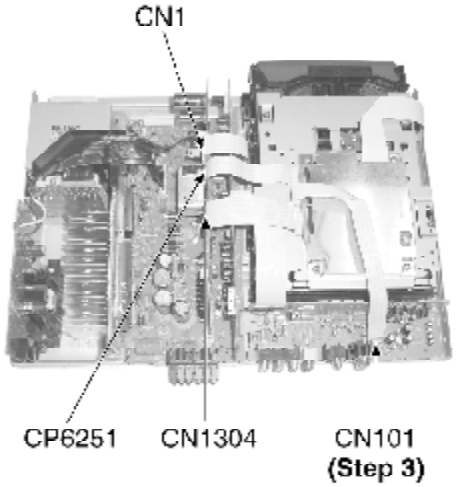
*** Repeat Step 1 to 4 of item 12.1**
*** Repeat Step 1 to 7 of item 12.2**
*** Repeat Step 1 to 4 of item 12.3**



Step 1 : Remove connectors (CP705, CN503 and CN501).

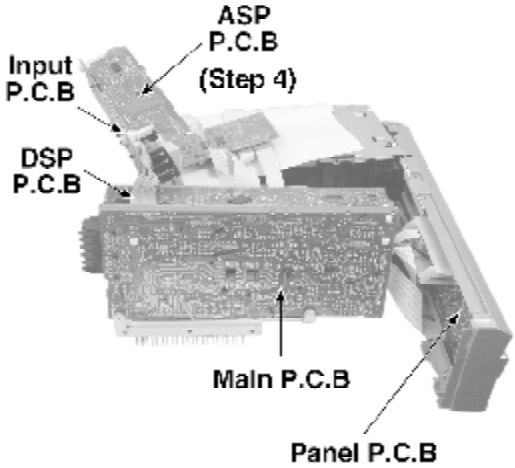


Step 2 : Remove all the screws.



Step 3 : Detach all the FFC (CN1, CP6251, CN1304 and CN101).

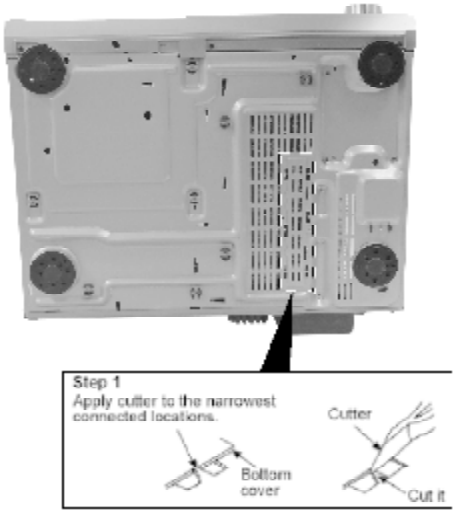
- Carry out Main P.C.B.



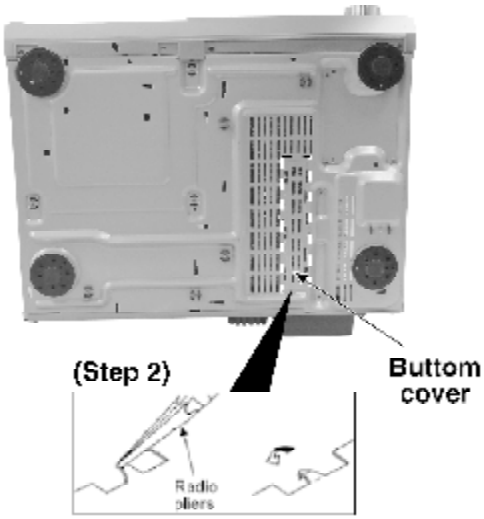
Step 4 : Reconnect all the connector and FFC.

12.6. Replacement of the Power IC

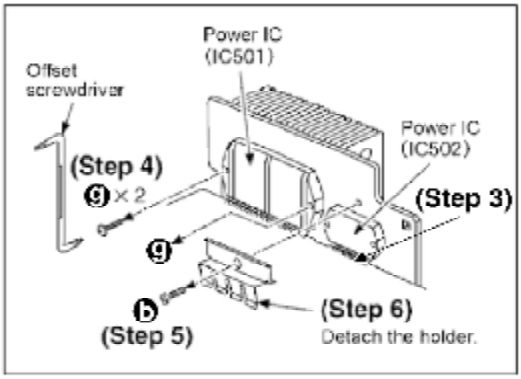
*** Repeat Step 1 to 3 of item 12.1**



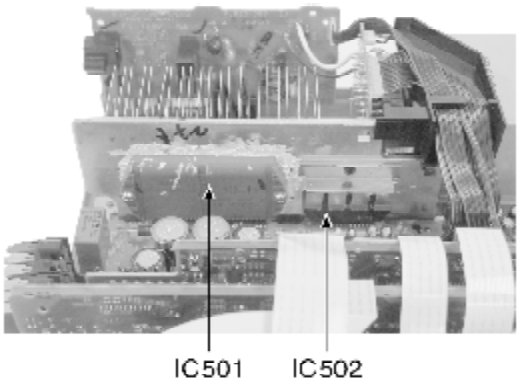
Step 1 : Cut out the connections located on the bottom cover. (6 points)
[Caution] The bottom cover is reused after replacement. Take care, not to lose it.



Step 2 : Bent the cut portion on the bottom cover.



Step 3 : Remove solder on Power IC.
Step 4 & 5 : Remove all the screws.
Step 6 : Remove Detach Holder.

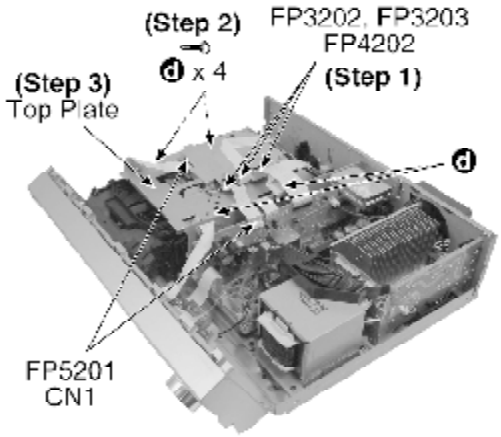


[Caution]

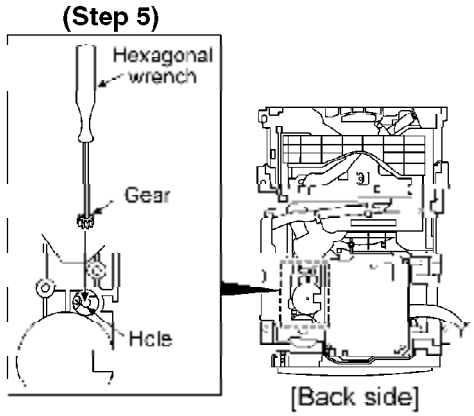
1. **Apply compound grease (RFKX0002 or equivalent heat dissipating compound) on the rear face of the power IC when attaching Power IC.**
2. **Tighten adequately the 3 screws after replacement of Power IC.**
3. **Use the offset screwdriver for tightening and loosening of screws.**

12.7. Replacement of DVD Traverse Unit

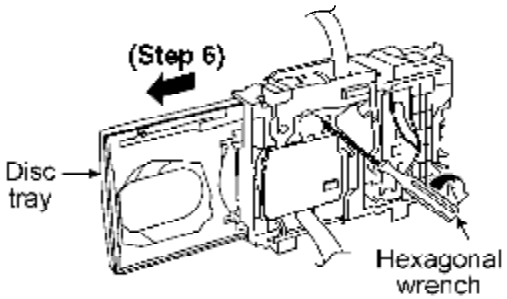
*** Repeat Step 1 to 3 of item 12.1**
*** Repeat Step 1 to 7 of item 12.2**
*** Repeat Step 1 to 3 of item 12.3**



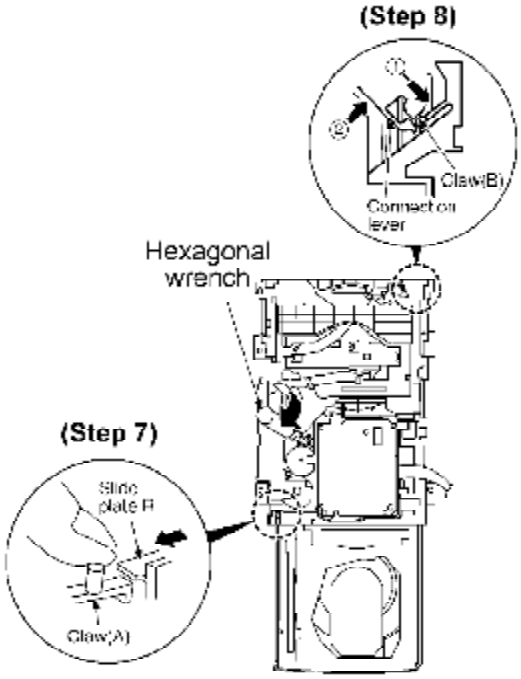
Step 1 : Detach all the FFC (FP3202, FP3203, FP4202, FP5201 and CN1).
Step 2 : Remove all the screws.
Step 3 : Remove Top Plate.



Step 5 : Insert the gear with hexagonal wrench into the hole.

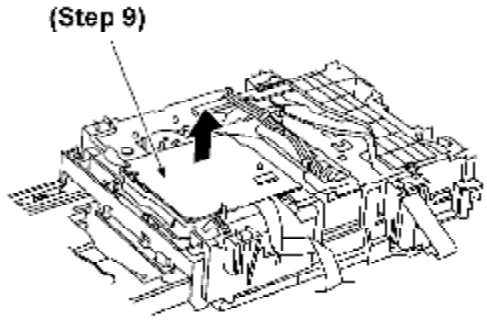


Step 6 : Rotate the hexagonal wrench in the direction of arrow, and then open the disc tray fully.

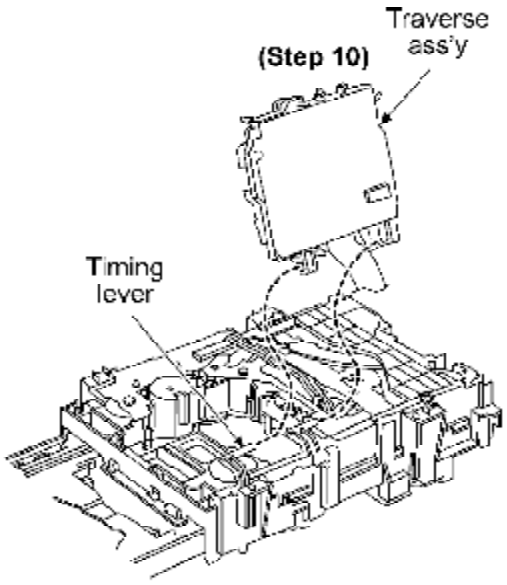


Step 7 : With pressing the claw (A), rotate the hexagonal wrench clockwise (The slide plate R moves for a little amount.

Step 8 : Pressing the claw (B) in the direction of arrow 1, the connection lever moves in the direction of arrow 2.

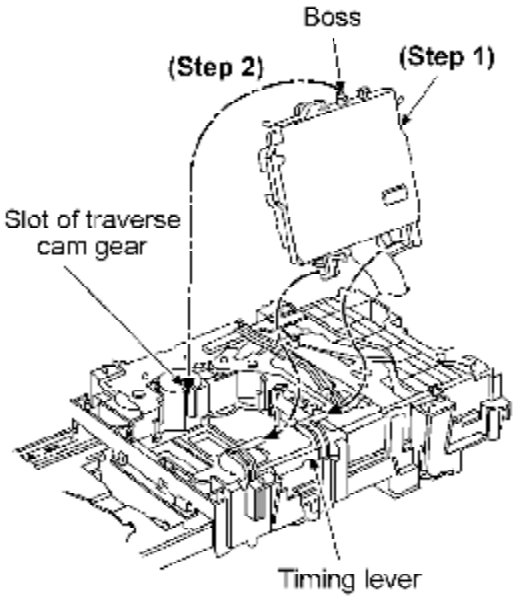


Step 9 : Lift up the traverse ass'y.



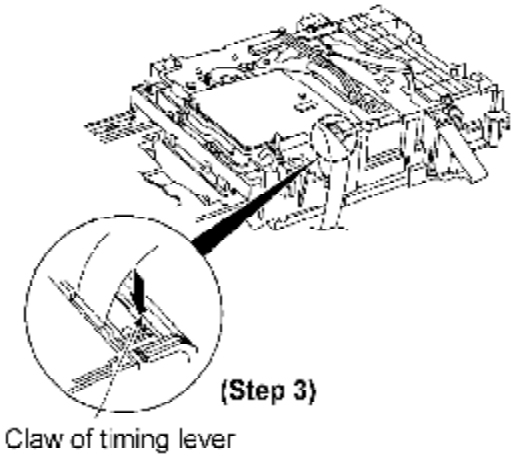
Step 10 : Remove the traverse ass'y from the timing lever.

[installation for traverse ass'y]

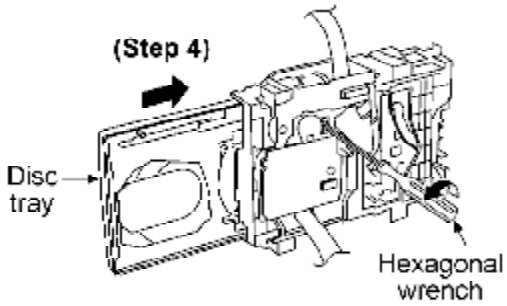


Step 1 : Install the traverse ass'y to the timing lever.

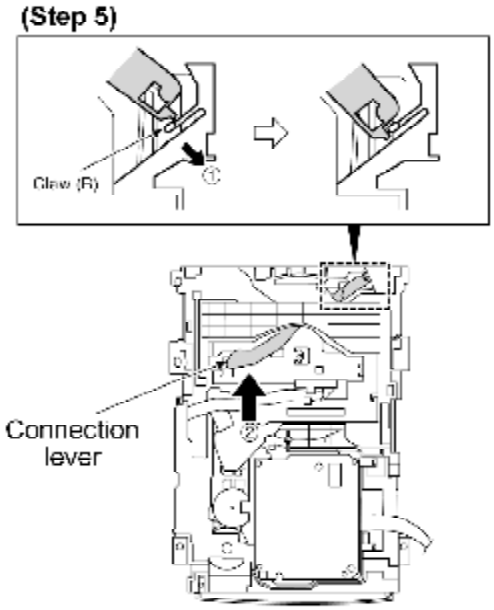
Step 2 : Align the boss of traverse cam gear.



Step 3 : Force the claw of timing lever.

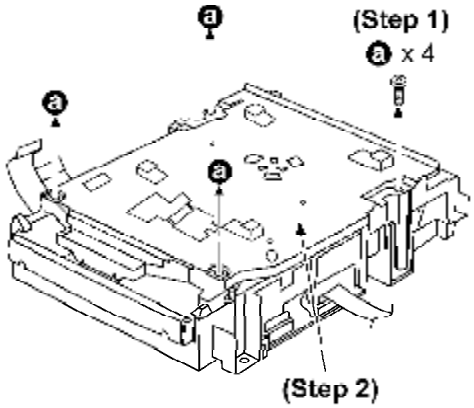


Step 4 : Rotate the hexagonal wrench in the direction of arrow, and then close the disc tray fully.

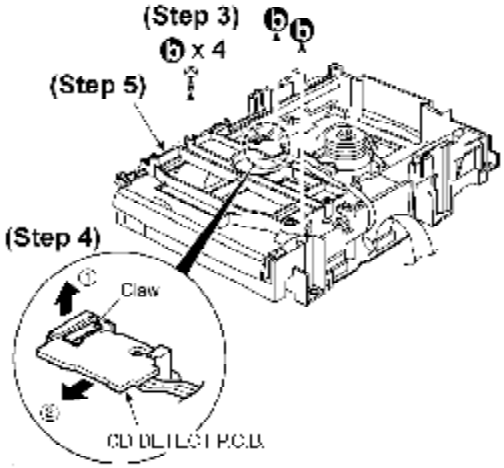


Step 5 : With pressing the claw (B) in the direction of arrow 1, force the connection lever in the direction of arrow.

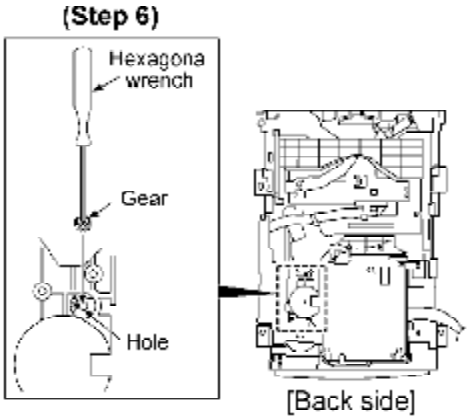
12.8. Replacement for the disc tray



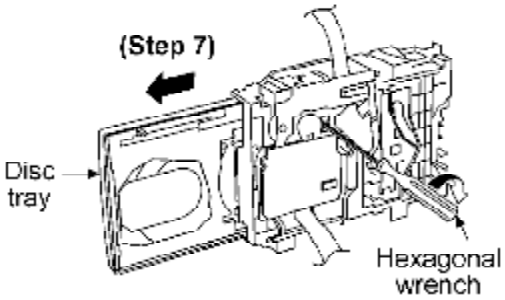
Step 1 : Remove all the screws.
Step 2 : Remove the upper plate.



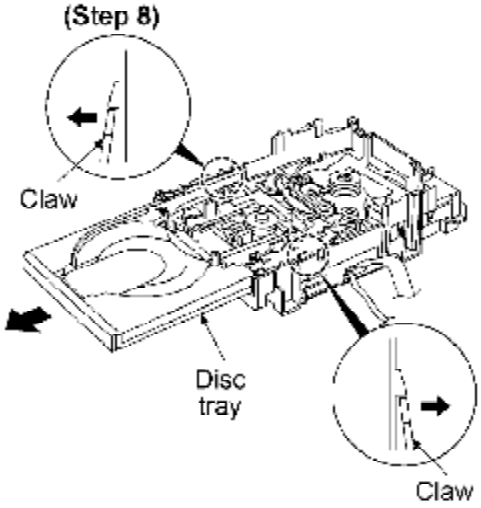
Step 3 : Remove all the screws.
Step 4 : With lifting the claw in the direction of arrow 1, draw the clamp CD DETECT P.C.B. in the direction of arrow 2.
Step 5 : Remove the mechanism cover.



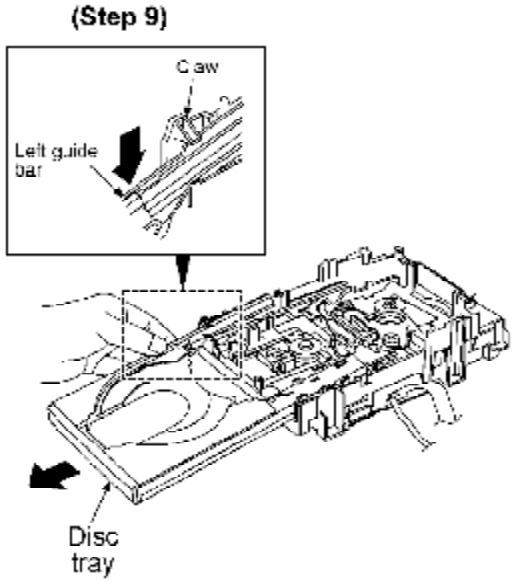
Step 6 : Insert the gear with hexagonal wrench into the hole.



Step 7 : Rotate the hexagonal wrench in the direction of arrow, and then open the disc tray fully.

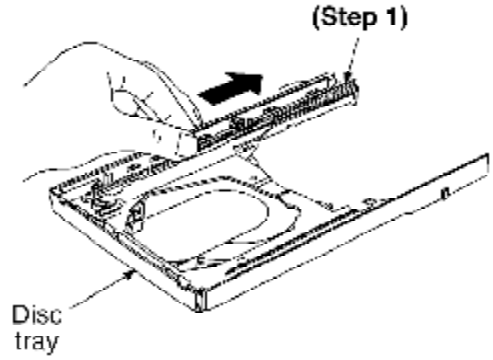


Step 8 : Release the both claws, and then draw the disc tray fully.

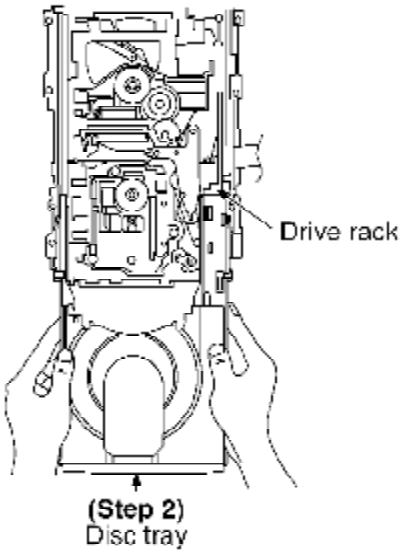


Step 9 : With forcing the left guide bar manually because the left guide bar interfers with claw, draw the disc tray.

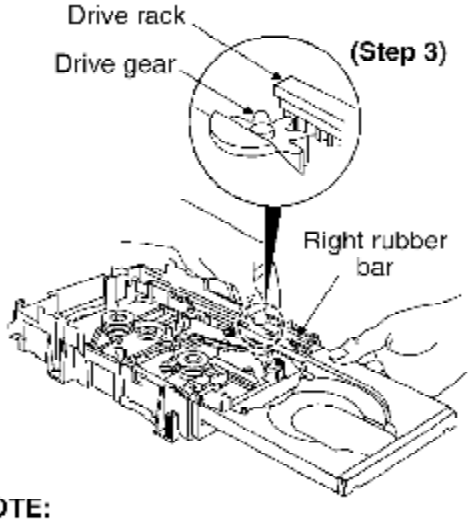
[Installation of the disc tray after replacement]



Step 1 : Slide the drive rack fully in the direction of arrow.

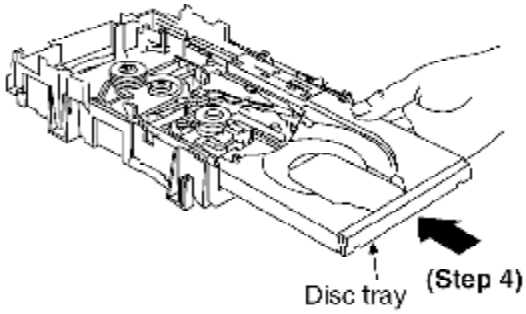


Step 2 : Holding the drive rack not to move, install the disc tray.



NOTE:
Force the right guide bar of tray base manually not to move upwards

Step 3 : Align the drive rack with the drive gear.

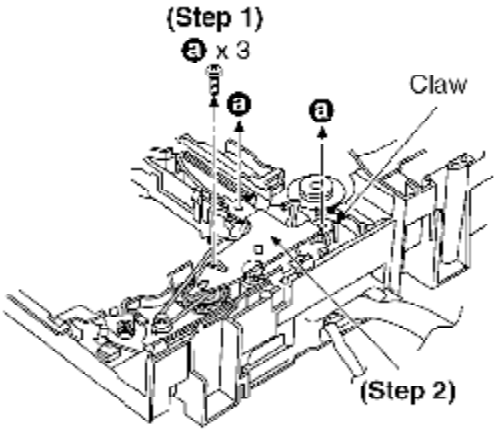


Step 4 : Holding the disc tray manually, push the disc tray in the direction of arrow.

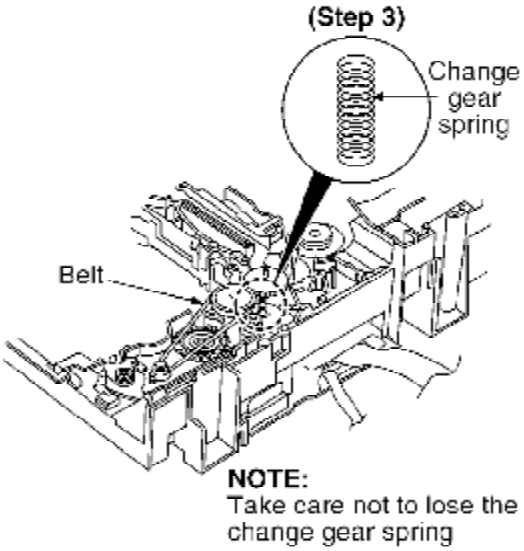
12.9. Disassembly and reassembly for mechanism base drive unit

[Disassembly for mechanism base drive unit]

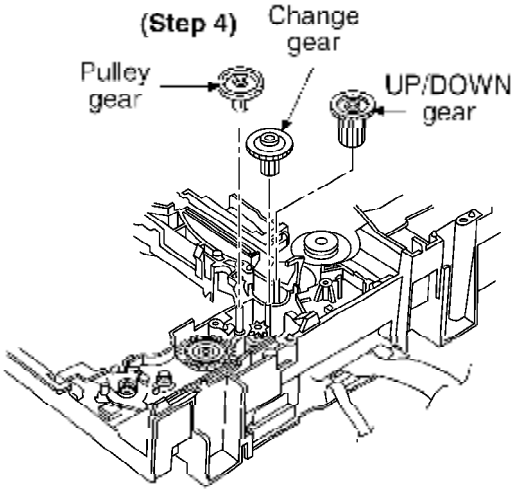
***Repeat Step 1 to 4 of item 12.1**
***Repeat Step 1 to 7 of item 12.2**
***Repeat Step 1 to 8 of item 12.3**
***Repeat Step 2 to 3 of item 12.5**
***Repeat Step 1 to 10 of item 12.7**
***Repeat Step 1 to 9 of item 12.8**



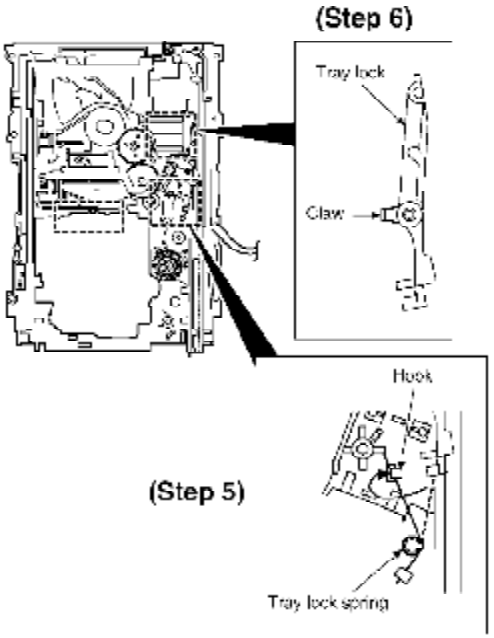
Step 1 : Remove all the screws.
Step 2 : Release the claw, and then remove the gear holder.



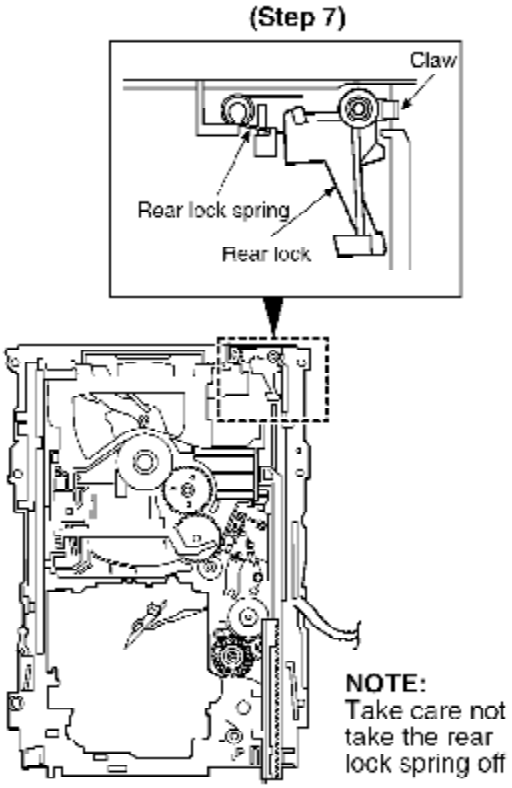
Step 3 : Remove the belt and change gear spring.



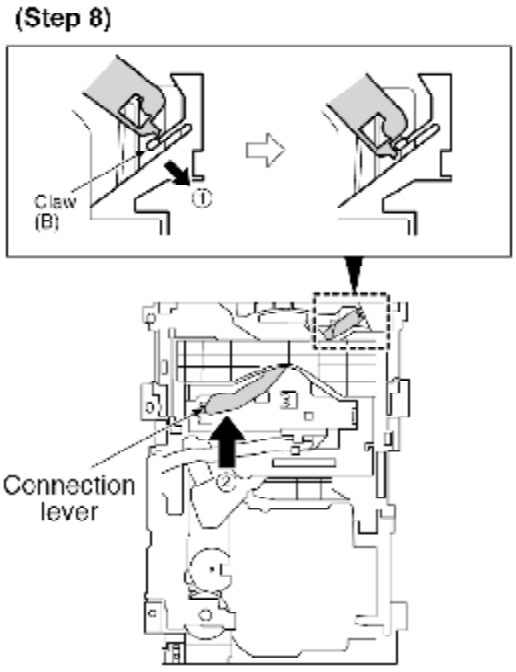
Step 4 : Remove the pulley gear, change gear and UP/DOWN gear.



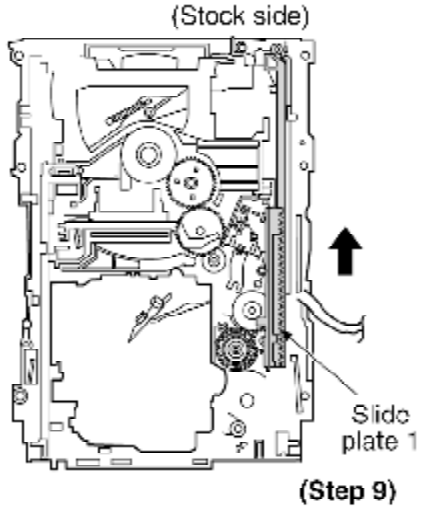
Step 5 : Install the tray lock spring to the hook temporally.
Step 6 : Release the claw, and then remove the tray lock.



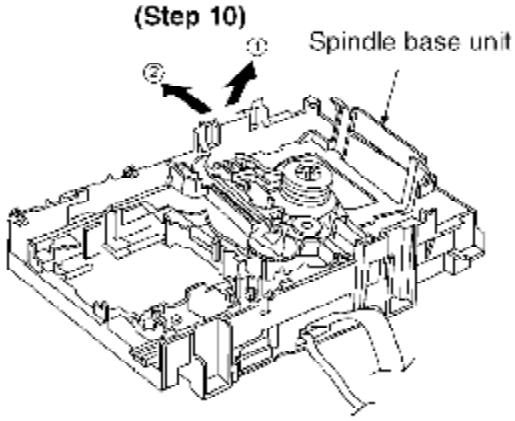
Step 7 : Release the claw, and then remove the rear lock.



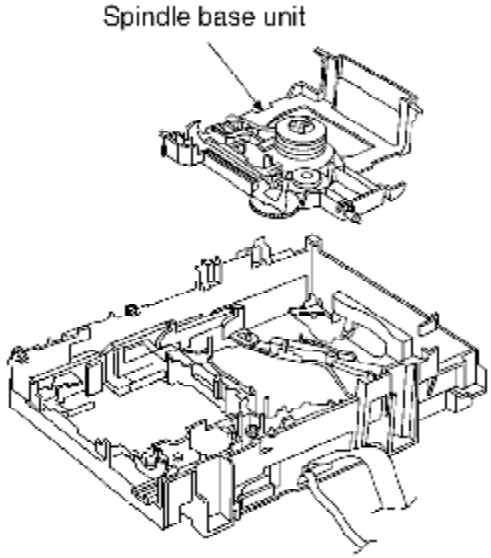
Step 8 : Pressing the claw (B) in the direction of arrow 1, force the connection lever in the direction of arrow 2.

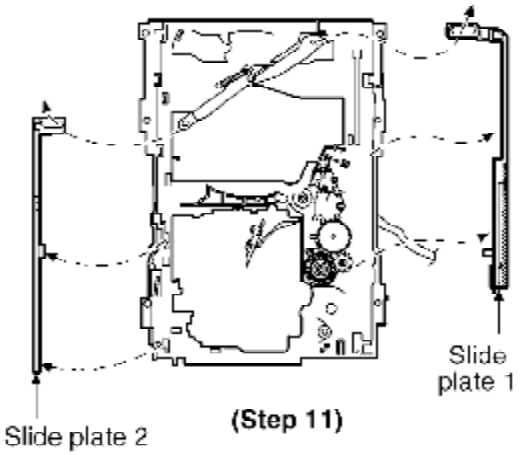


Step 9 : Move the slide plate 1 to the end of stock side.

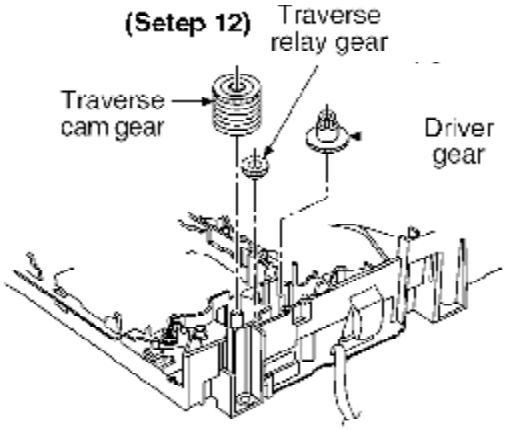


Step 10 : Lift up the left end of spindle base unit in the direction of arrow 1, and then remove the unit in the direction of arrow 2.



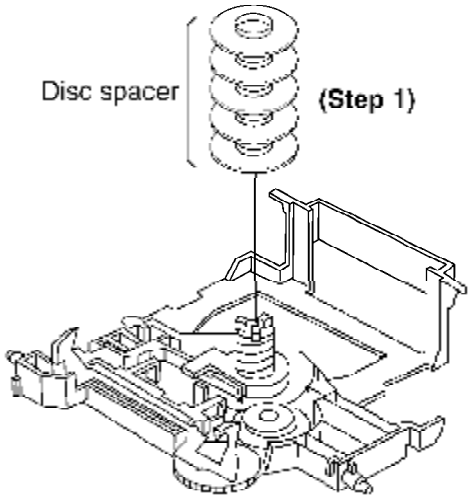


Step 11 : Remove the slide plate 1 and slide plate 2.

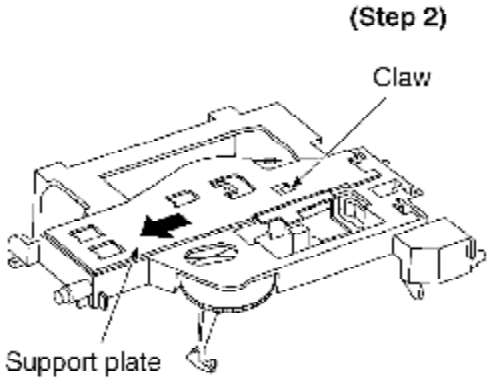


Step 12 : Remove the traverse relay gear, traverse cam gear and driver gear.

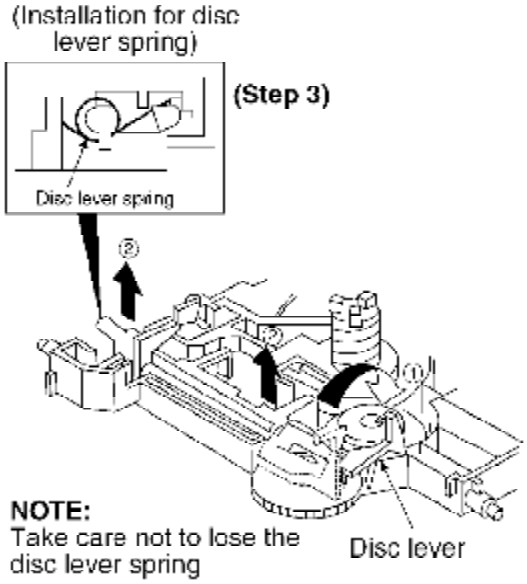
[Disassembly/reassembly for the spindle base unit]



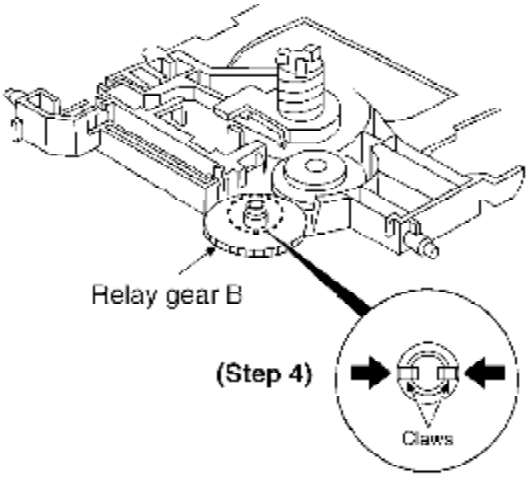
Step 1 : Draw the 5 disc spacers.



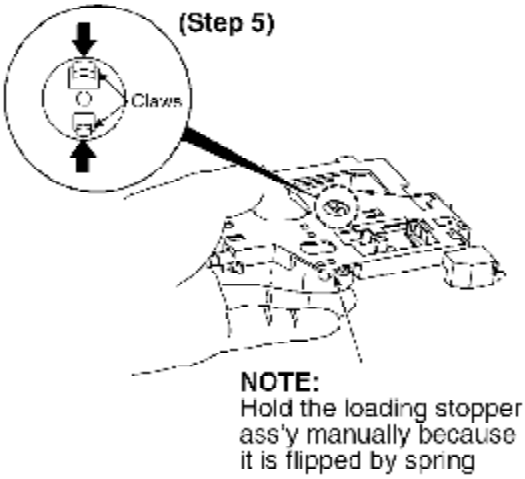
Step 2 : Pushing the claw, slide the support plate in the direction of arrow, and then remove it.



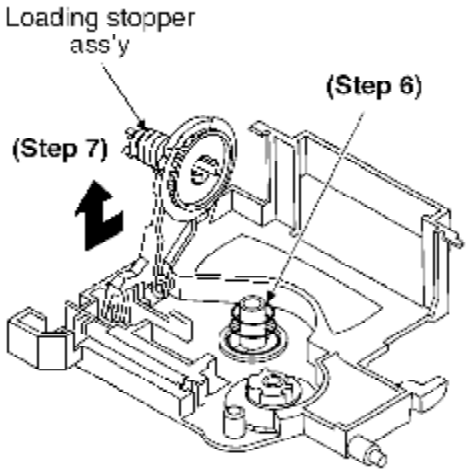
Step 3 : Rotate the disc lever in the direction of arrow 1.



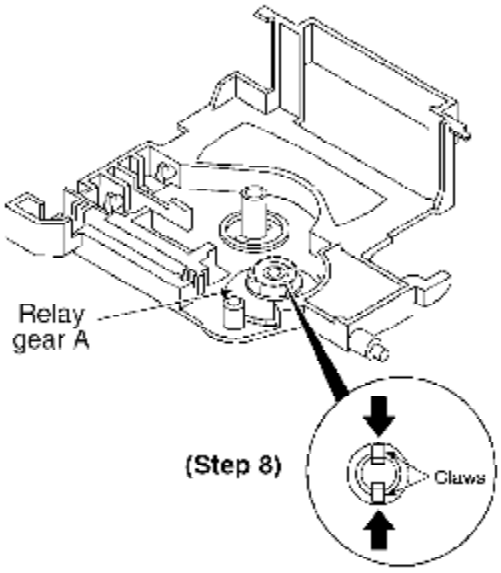
Step 4 : Release the 2 claws, and then draw the relay gear B.



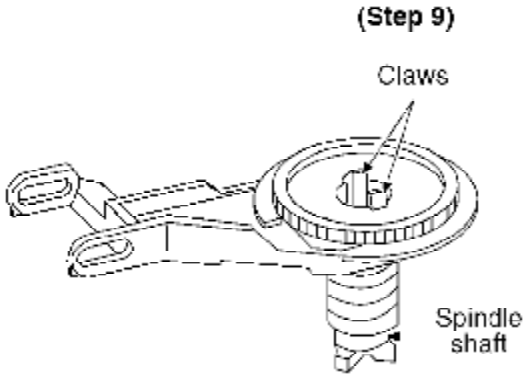
Step 5 : Release the 2 claws.



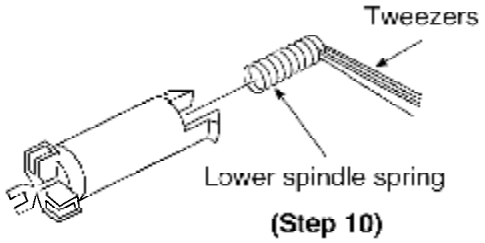
Step 6 : Remove the cushion spring.



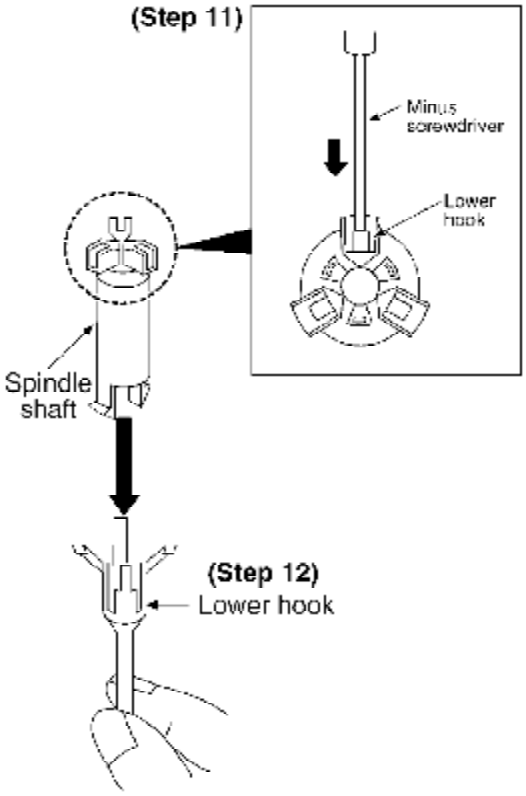
Step 8 : Release the 2 claws, and then remove the relay gear A.



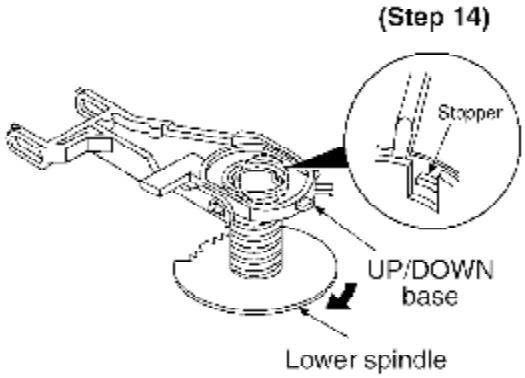
Step 9 : Release the 2 claws, and then remove the spindle shaft.



Step 10 : Remove the lower spindle spring with tweezers.



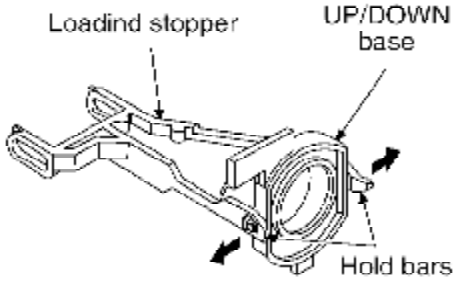
Step 11 : Force the lower hook with thin tip of minus screwdriver.
Step 12 : Squeeze the shaft of lower hook, and then draw it.



(Step 13)

Step 13 : Rotate the lower spindle in the direction of arrow until the lower spinder interferes with stopper.

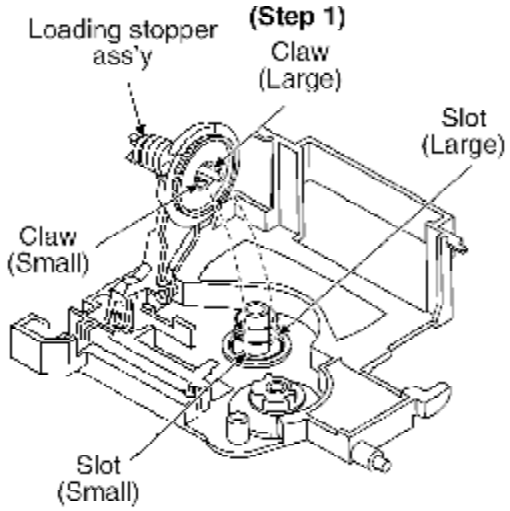
Step 14 : Insert the thin tip of minus screwdriver between the lower spinder and UP/DOWN base, and then slacken the lower spindle to release the stopper. Then, rotate the lower spinder and remove it.



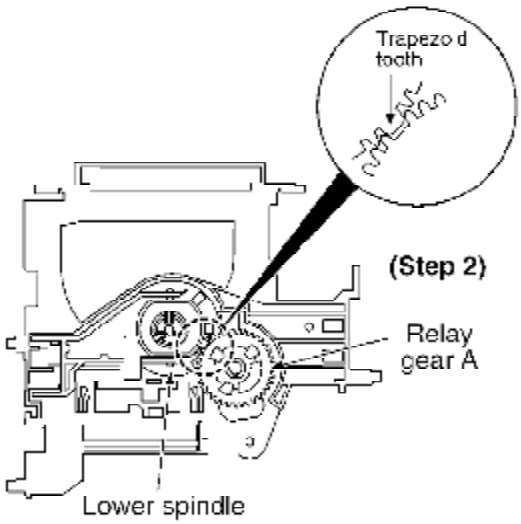
(Step 15)

Step 15 : Rotate the UP/DOWN base at a 90 degree angle. Then, spread the hold bars of loading stopper and remove the UP/DOWN base.

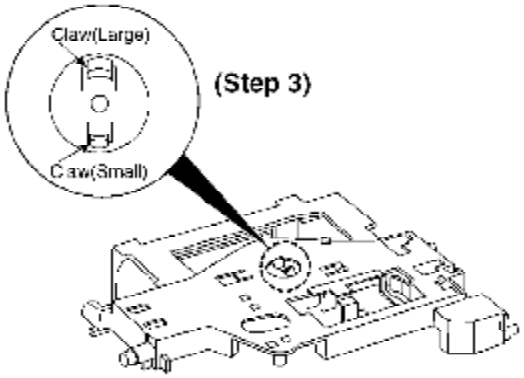
[Installation for loading stopper ass'y]



Step 1 : Align the claw of loading stopper ass'y with the slot of spindle base. (Caution should be exercised when alignment of claw due to the size of claws.

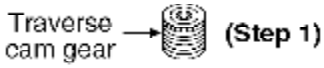


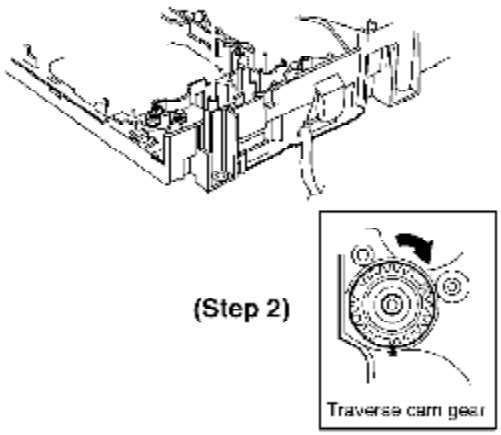
Step 2 : Lower the loading stopper ass'y and then align the lower spindle with the trapezoid tooth of relay gear A.



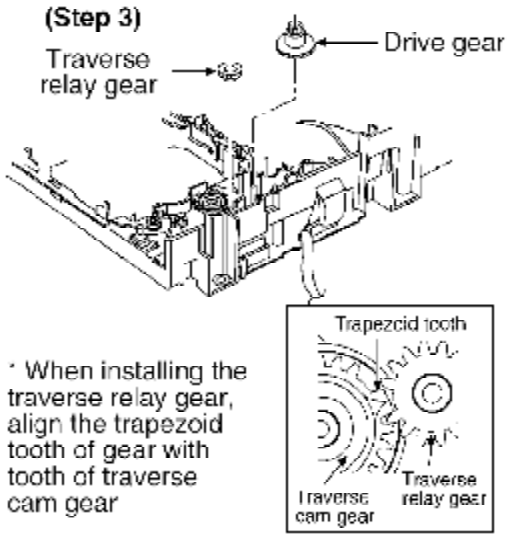
Step 3 : Force the loading stopper ass'y latch the claw firmly.

[Reassembling for mechanism base drive unit]

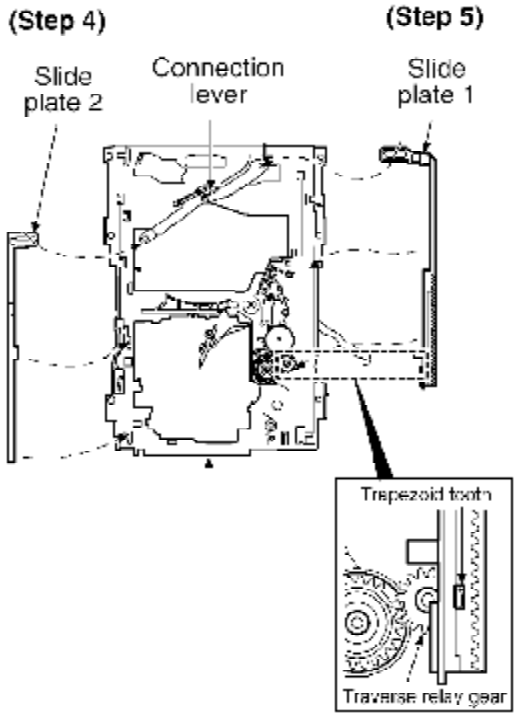




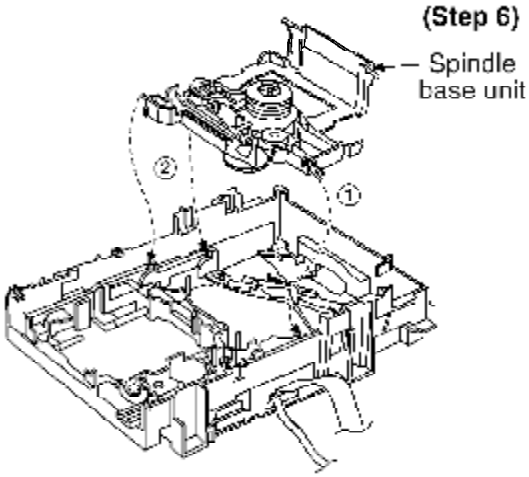
Step 1 : Install the traverse cam gear.
Step 2 : Rotate the traverse cam gear to the direction of arrow.


(Step 3)
Drive gear
Traverse relay gear
* When installing the traverse relay gear, align the trapezoid tooth of gear with tooth of traverse cam gear
Trapezoid tooth
Traverse relay gear
Traverse cam gear

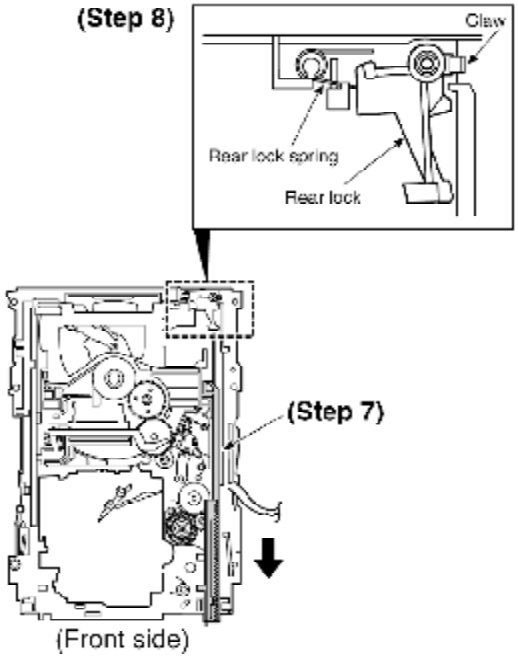
Step 3 : Install the drive gear and traverse relay gear.



Step 4 : Install the slide plate 2 to the mechanism base, and then match to the connection lever.
Step 5 : Install the slide plate 1 to the mechanism base, and then match to the connection lever and align the trapezoid tooth of traverse relay gear with the side plate 1.

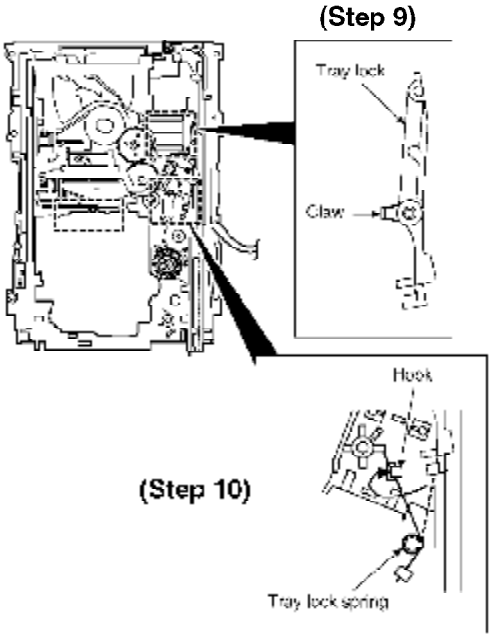


Step 6 : Install the spindle base unit. (First, install slide plate A).

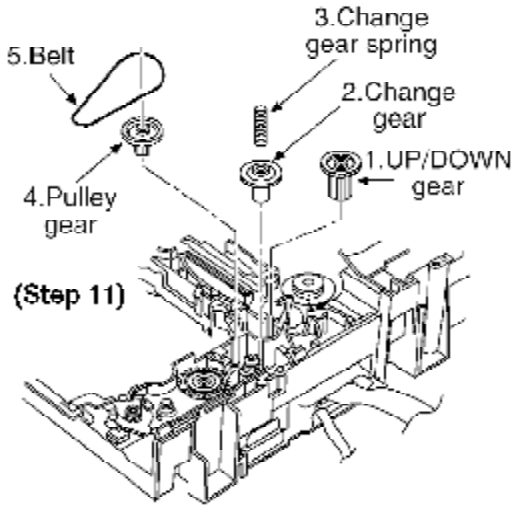


Step 7 : Move the slide plate 1 to forward fully.

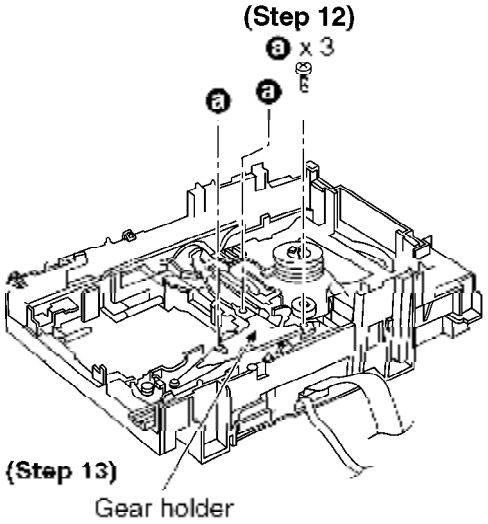
Step 8 : Install the rear lock. (The claw should be latched).



Step 9 : Install the tray lock. (The claw should be latched).
Step 10 : Remove the tray lock spring from hook, and then latch to the tray lock.



Step 11 : Install the UP/DOWN gear, change gear, change gear spring, pulley gear and belt in the order of 1-5.



Step 12 : Install the gear holder, and then tighten the screw (a).
Step 13 : Install the tray base, traverse ass'y, mechanism cover and upper plate.
[Operation check after servicing]
Check the proper operation of following items with gear and hexagonal screwdriver.

1. Open/close of tray base

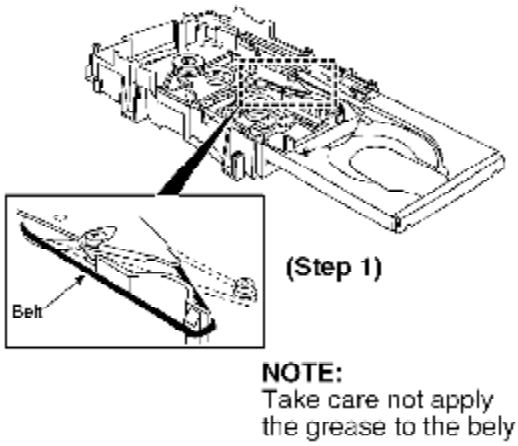
2. Moving the tray base to the stock side

3. UP/DOWN operation of spindle base unit

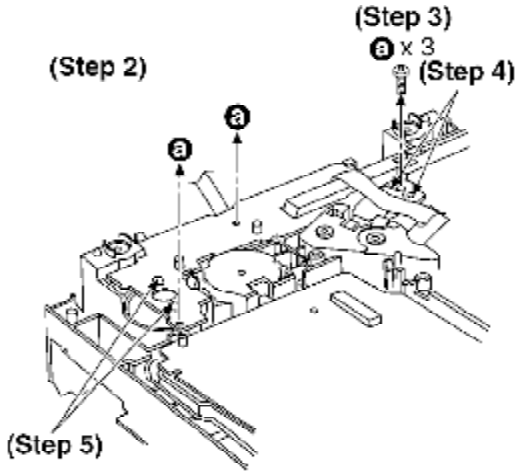
4. UP/DOWN operation of traverse ass'y

12.10. Replacement for the motor ass'y

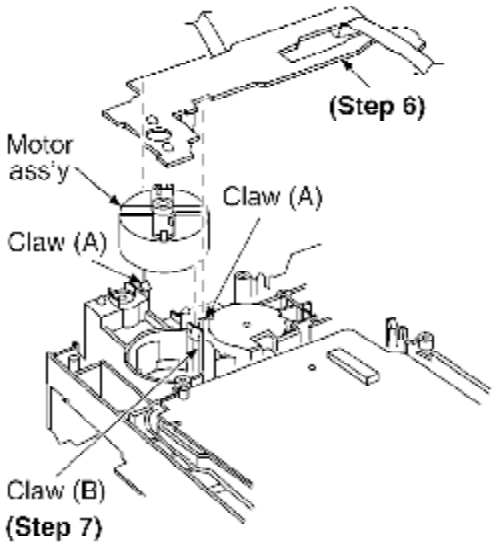
***Repeat Step 1 to 4 of item 12.1**
***Repeat Step 1 to 7 of item 12.2**
***Repeat Step 1 to 8 of item 12.3**
***Repeat Step 2 to 3 of item 12.5**
***Repeat Step 1 to 10 of item 12.7**
***Repeat Step 1 to 9 of item 12.8**



Step 1 : Install the belt temporarily.



Step 2 : Upset the CD loading unit.
Step 3 : Remove all the screws.
Step 4 : Unsolder the plunger terminals (2 points).
Step 5 : Unsolder the motor terminals (2 points).

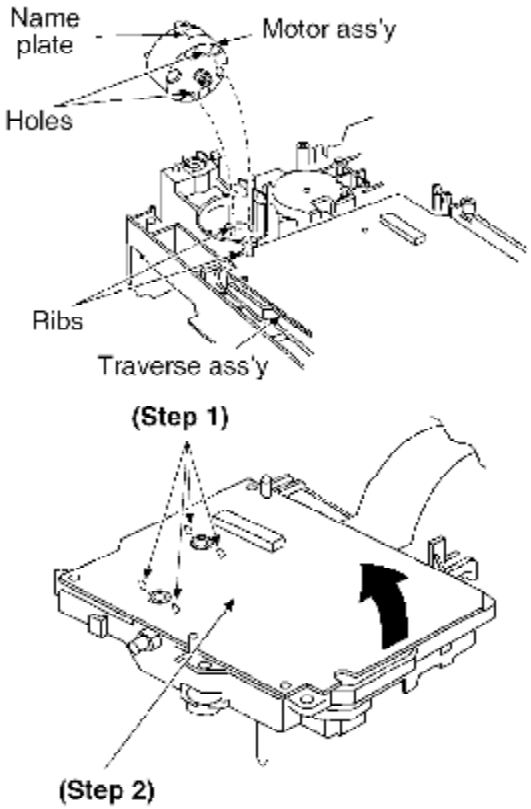


Step 6 : Release the 2 claws (A), and then remove the Motor P.C.B.
Step 7 : Release the claw (B), and then remove the motor ass'y.

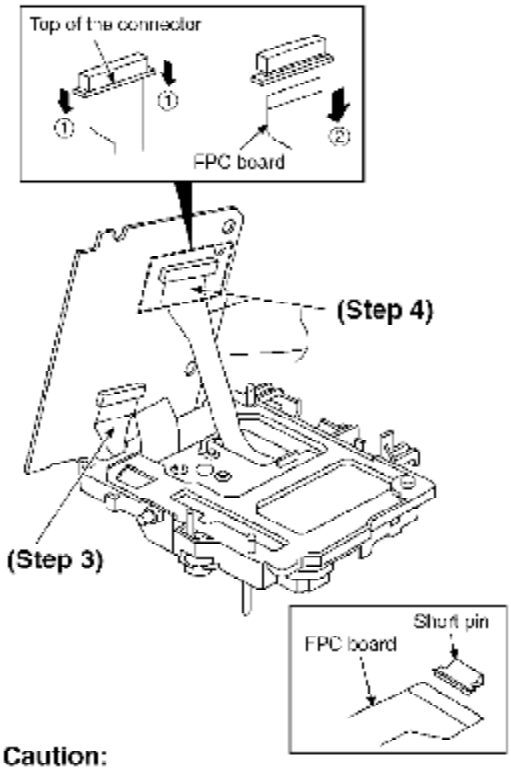
[Notice for motor ass'y installation]

1. Locate the name plate of motor to the traverse ass'y.

2. Align the hole of motor with the ribs.

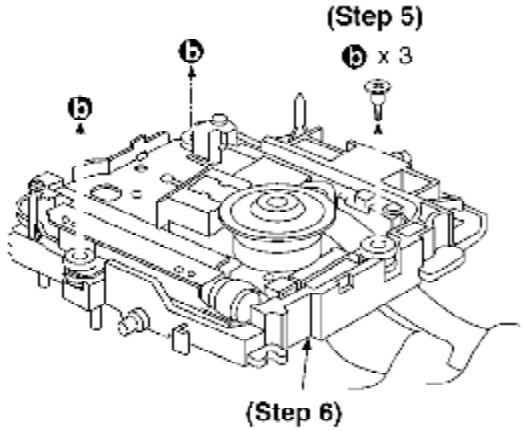


Step 1 : Unsolder the DVD module terminals (4 Points).
Step 2 : Remove the DVD module (2) P.C.B.

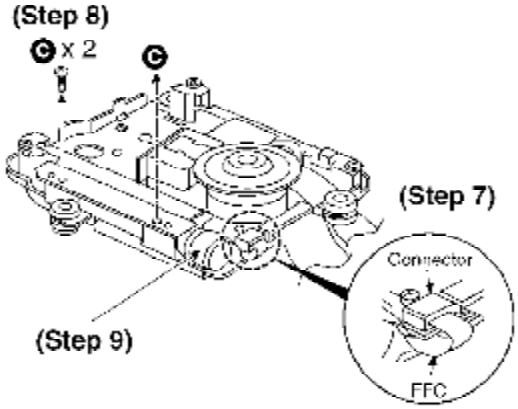


Caution:
Insert short pin into the traverse unit FPC board
(Refer to **"Handing Precaution for Traverse Deck".)**

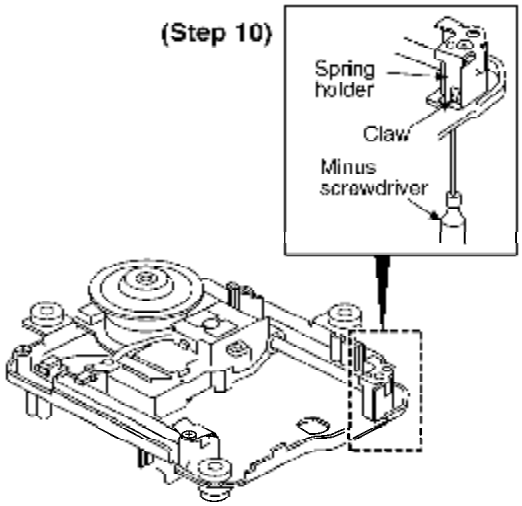
Step 3 : Pull out the FFC.
Step 4 : Remove the FPC board.



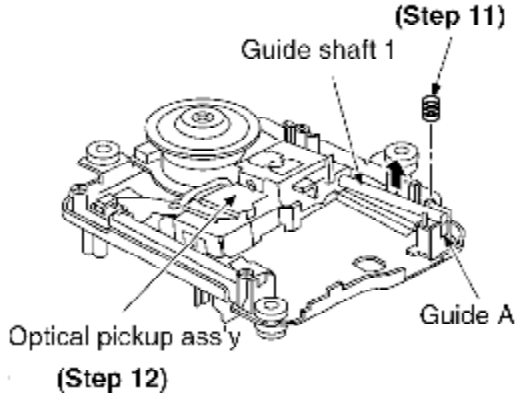
Step 5 : Remove all the screws.
Step 6 : Remove the traverse chassis.



Step 7 : Remove the FFC from the connector.
Step 8 : Remove all the screws.
Step 9 : Remove the traverse motor ass'y.

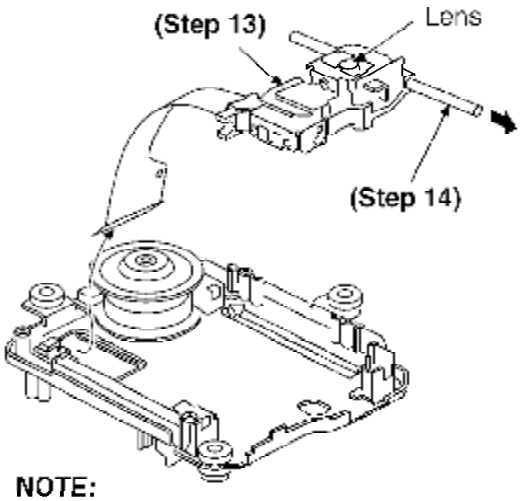


Step 10 : Release the claw, and then remove the spring holder.



NOTE:
Take care not to lose the spring

Step 11 : Remove the spring.
Step 12 : Lift up the optical pickup ass'y and then remove the guide shaft 1 from the guide A.

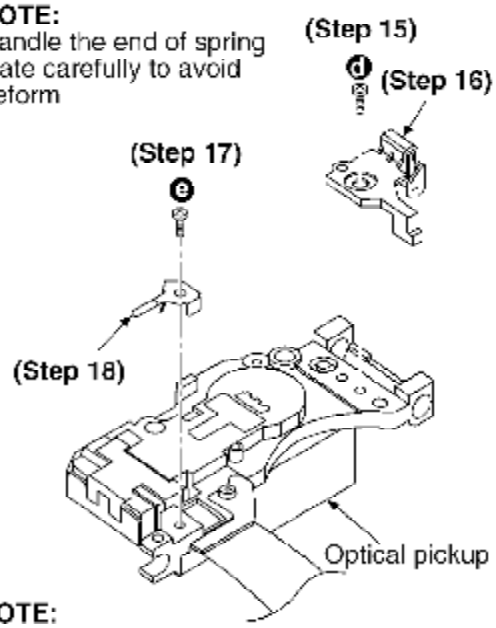


NOTE:
1. Use care to prevent damage the optical pickup, due to the precision construction.
2. Do not touch the lens of the optical pickup.

Step 13 : Remove the optical pickup ass'y.

Step 14 : Pull out the guide shaft 1.

NOTE:
Handle the end of spring plate carefully to avoid deform



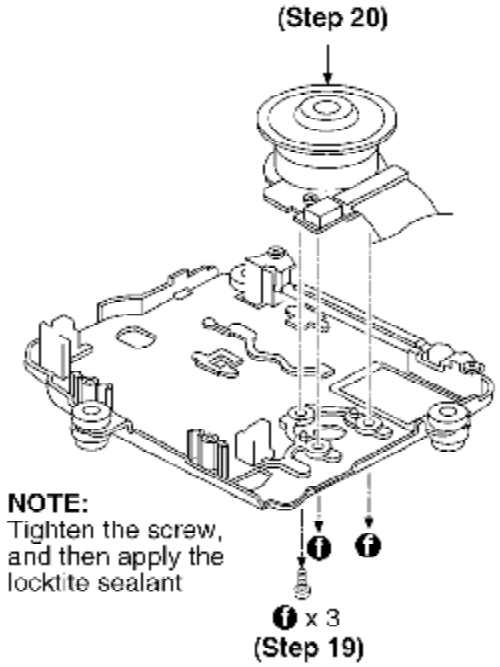
NOTE:
Tighten the screw, and then apply the locktite sealant

Step 15 : Remove all the screws.

Step 16 : Remove the nut unit.

Step 17 : Remove all the screws.

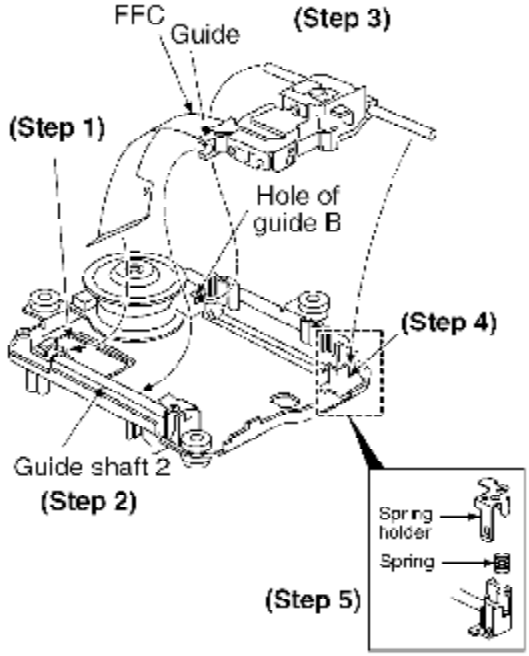
Step 18 : Remove the spring plate.



Step 19 : Remove all the screws.

Step 20 : Remove the spindle motor ass'y.

[Installing the optical pickup]



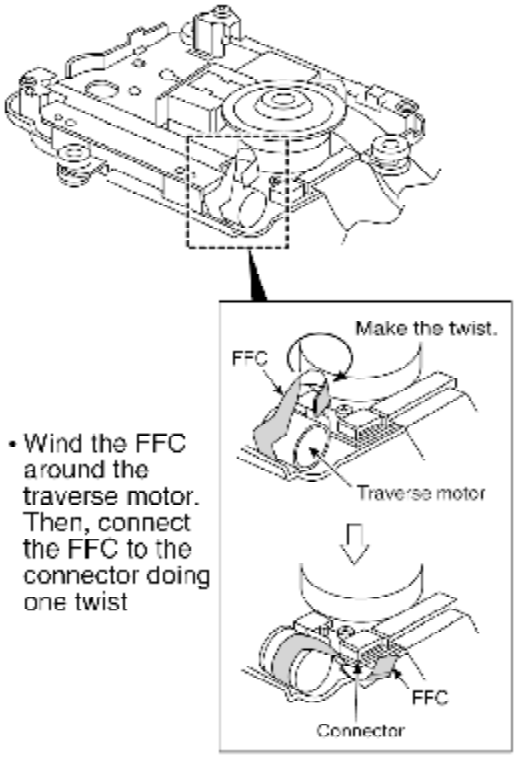
Step 1 : Pass the FFC through the slit of traverse basement.

Step 2 : Align the guide with the guide shaft 2.

Step 3 : Install the tip end of guide shaft 1 to the hole of guide B.

Step 4 : Install the guide shaft 1 to the guide A.

Step 5 : Install the spring and spring holder.

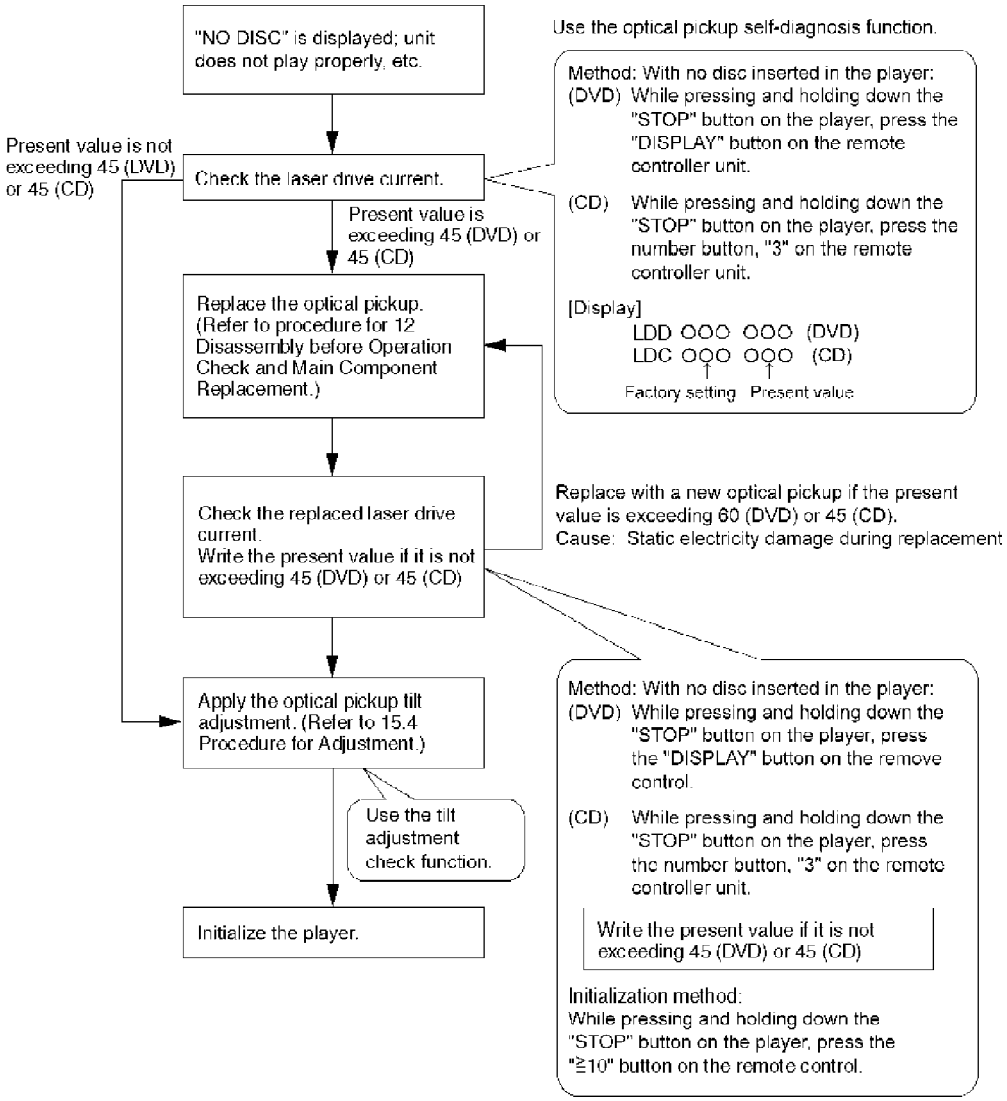

• Wind the FFC around the traverse motor. Then, connect the FFC to the connector doing one twist
Make the twist.
FFC
Traverse motor
FFC
Connector

13. Optical Pickup Self-Diagnosis and Replacement Procedure

13.1. Self-diagnosis

This unit is equipped with the optical pickup self-diagnosis function and the tilt adjustment check function. Follow the procedure described below during repair in order to perform self-diagnosis and tilt adjustment effectively. Especially when “NODISC” is displayed, be sure to apply the self-diagnosis function before replacing with an optical pickup. Replacement of optical pickup generally requires when the present value of laser drive exceeds 45 (DVD) or 45 (CD).

Note:
Start diagnosis within three minutes after turning on the power (as diagnosis fails when the unit becomes warm).


"NO DISC" is displayed; unit does not play properly, etc.
Use the optical pickup self-diagnosis function.
Method: With no disc inserted in the player:
(DVD) While pressing and holding down the "STOP" button on the player, press the "DISPLAY" button on the remote controller unit.
(CD) While pressing and holding down the "STOP" button on the player, press the number button, "3" on the remote controller unit.
[Display]
LDD OOO OOO (DVD)
LDC OOO OOO (CD)
Factory setting
Present value
Present value is not exceeding 45 (DVD) or 45 (CD)
Check the laser drive current.
Present value is exceeding 45 (DVD) or 45 (CD)
Replace the optical pickup. (Refer to procedure for 12 Disassembly before Operation Check and Main Component Replacement.)
Check the replaced laser drive current.
Write the present value if it is not exceeding 45 (DVD) or 45 (CD)
Replace with a new optical pickup if the present value is exceeding 60 (DVD) or 45 (CD).
Cause: Static electricity damage during replacement
Apply the optical pickup tilt adjustment. (Refer to 15.4 Procedure for Adjustment.)
Use the tilt adjustment check function.
Initialize the player.
Method: With no disc inserted in the player:
(DVD) While pressing and holding down the "STOP" button on the player, press the "DISPLAY" button on the remove control.
(CD) While pressing and holding down the "STOP" button on the player, press the number button, "3" on the remote controller unit.
Write the present value if it is not exceeding 45 (DVD) or 45 (CD)
Initialization method:
While pressing and holding down the "STOP" button on the player, press the "≧10" button on the remote control.

13.2. Cautions to Be Taken During Replacement of Optical Pickup and Spindle Motor

Before replacing the optical pickup and spindle motor, check a total usage time respectively. Follow the checking method described below.

Item	Status and Key Function	Display
Checking DVD, CD laser usage time	With the unit stopped and no disc inserted, press the. ■ button on the player and the ▲ buttonon the remote controller unit.	T1_xxxx_yyyy / xxxx(DVD), y total time is displayed with a digit number by the ten hour
Checking spindle motor usage time	With the unit stopped and no disc inserted, press the ■ button on the player and the ▶ buttonon the remote controller unit.	T1_xxxx / xxxx: total time is displayed with a four-digit nu the ten hours.
Resetting DVD, CD laser usage time	While the DVD and CD laser usage times are displayed, press the ■ button on the player and the ▼ button on the remote controller unit.	T1_0000_0000
Resetting spindle motor usage time	While the spindle motor usage time is displayed, press the ■ button on the player and the ◀ buttonon the remote controller unit.	T2_0000

13.2.1. Cautions to be taken during replacement of optical pickup

Optical pickup could be damaged due to the static electricity discharged from human body. Wear proper protection gear against static electricity during optical pickup and its peripheral repair. (Refer to “Cautions to Be Taken When HandlingOptical Pickup”.)

- Do not touch laser diode, actuator and their peripherals.

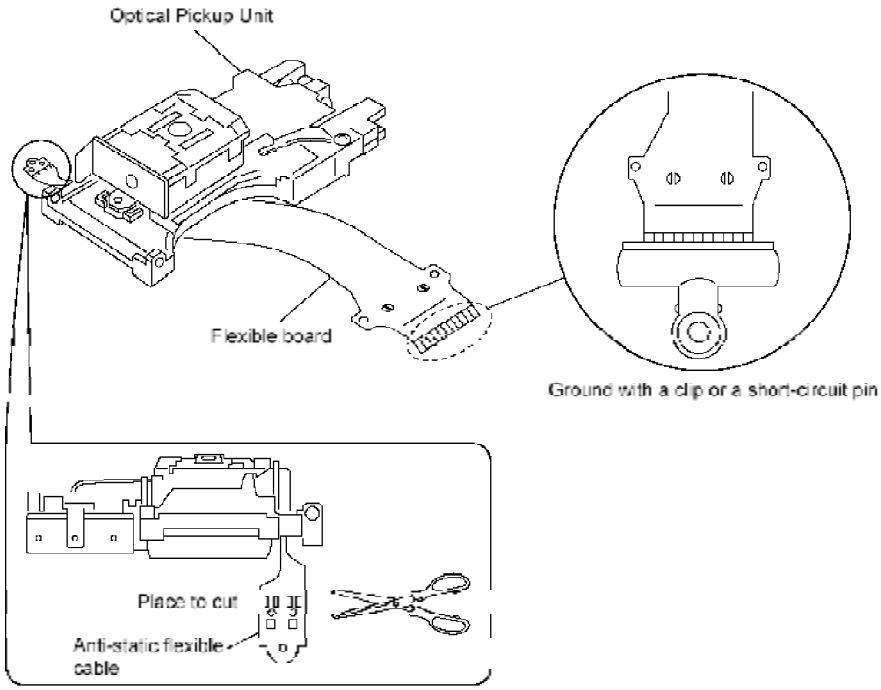
- Do not check laser diode with a tester and such. (The tester will be destroyed.)

- For short-circuiting or removing laser diode, the use of an anti-static soldering iron is recommended. (Recommended model: HAKKO ESD product)

- Solder the land of the flexible cable in the optical pickup.

Note:

If an anti-static soldering iron is not available, short-circuit the terminal surface of the flexible cable and then the land using a clip or equivalent device.



14. Self-Diagnosis Function

This unit is equipped with the self-diagnosis function, which displays an error when it occurs, for use during servicing.

14.1. Automatic Displayed Error Codes

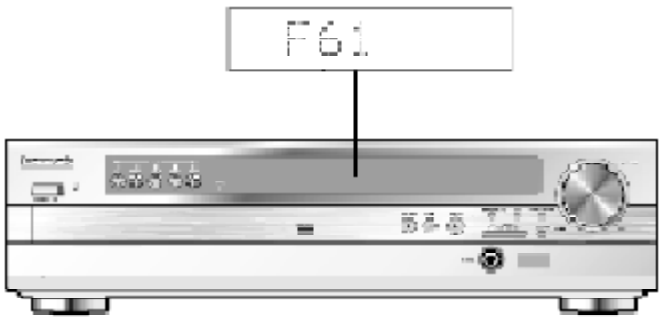
14.1.1. Automatic Display Function

For a power unit error, the code is automatically displayed.

F61:

Automatically displayed on the LCD of the player.

Fig. 14-1



14.1.2. Re-Display

- For F61 Display

- When the code, F61 is displayed, the power is automatically turned off.

- The code, F61 is displayed for three seconds, and then the current time appears.

- To retrieve the code, turn on the power button so that the code F61 appears, however, is switched to time display after three seconds, and the power is automatically turned off.

14.1.3. Description of Error Code

14.1.3.1. F61

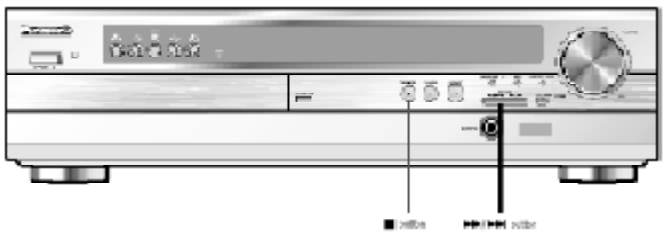
- State, Condition
  When the power is turned on, the unit is automatically turned off. The power does not turn on.
- Cause, Troubleshooting
  Power circuit system failure and/or direct current flown to speaker terminal / Identify the cause and replace with new parts.

14.2. Memorized Error Codes

14.2.1. Activating Self-Diagnosis Function and Displaying Method

1. Turn on the power.
2. Select DVD/CD function. With no DVD/CD inserted in the player, press and hold down the ■ button for at least two seconds, and press the “0” buttonon the remote control for at least two seconds in order to display “DVD_F_ _ _ ”.
3. Press the ■ button. If a memorized error is detected, the result of self diagnosis is displayed. (Ex.: T H15) / If several errors are detected, press the ■ button to display each.

Fig. 14-2



14.2.2. Re-Display

- Press the power button to turn off the power, and then turn on the power.
- The details of self diagnosis are stored in the unit memory. / To retrieve them, follow the procedure described the above, “Activating Self-Diagnosis Function and Displaying Method”.

14.2.3. Deleting Details of Self Diagnosis

- After repair, press and hold down the ■ button for at least five seconds, [CLEAR] appears for a second and then “T_____” appears. (Deleting the details ofself diagnosis)
- After repairing errors, be sure to delete the details of self diagnosis.

14.3. Mode Table 1

Following modes are available with combinations of the pressed buttons on the player and on the remote controller unit.

Player	Remote controller unit	Usage
■ button	0	Error code display (Refer to the item, 14.4. DVD Error Code Des
	5	Tilt adjustment
	6	Region number and broadcasting system check
	7	Built-in program version check
	DISPLAY	DVD laser drive current check
	3	CD laser drive current check
	PAUSE	Writing of laser drive current value after replacement of optical (Do use this function only when optical pickup is replaced.)
	≧10	Initialization of the player (factory setting is restored.) / Used af replacement of micro-computer and its peripherals and printed board.

14.4. DVD/CD Self-Diagnosis Error Code Description

Error Code	State, Condition	Cause, Troubleshooting
H15	The disc tray cannot be opened: it closes spontaneously.	Disc tray open/close detection switch (S failure. / (Check and replace)
H16	The disc tray cannot be closed: it opens spontaneously.	

Error Code	Meaning	Details
U. H. Error		
U11	Focus servo failure	
H01	Tray loading failure	
H02	Spindle servo failure	(Spindle servo, DSC, SP motor, CLV ser
H03	Traverse motor failure	
H04	Tracking servo error	
H05	Seek timeout failure	
DSC system		
F500	DSC failure	DSC stops due to servo failure. / (Startu failure, etc.)
F501	DSC not Ready failure	Communication failure between DSC an computer / (No communication because does not move)
F502	DSC Time out failure	See F500.
F503	DSC communication failure	Communication failure (Result failure o after communication command is transı
F505	DSC Attention Error	See F500.
F506	Invalid media	Disc is placed upside down; TOC is unr or invalid disc is inserted.
Disc Code		
F103	Ilegal highlight position	Disc standard is possibly illegal when h is displayed.
IIC Error		
F4FF	Forced initialization failure (Time out)	
F880	Unsuitable task number	When a message arrives from not existi
F890	A message is sent during AV task transmission	During transmission of a message to AV
F891	Unable to transmit a message to AV task	When transmission of a message to AV starts
F893	FROM altered	
F894	EEPROM failure	
F8A0	Unsuitable message command	When transmission of a message to AV starts

14.5. Error Codes Stored During No Play

Error Code	Meaning	System Computer Item	Setting Task	Intern in sy com
F0BF	6) Unable to replay due to physical layer identification failure	PCND_NOPLAY_PHYSICAL 0x50	DriveManager	0xD0BI
F0C0	8) DVD: Unable to replay due to no DVD Video/Audio/VR	PCND_NOPLAY_VIDEO 0x70	DiscManager	0xD0C(
F0C1	9) DVD: Prohibited due to illegal regional code	PCND_NOPLAY_RCD 0x80	DiscManager	0xD0C1
F0C2	A) DVD: No replay due to PAL system	PCND_NOPLAY_PAL 0x90	DiscManager	0xD0C2
F0C3	B) DVD: All title replay prohibited in parental setting	PCND_NOPLAY_PTL 0xA0	DiscManager	0xD0C3
F0C4	C) VCD: Prohibited due to PHOTO CD format	PCND_NOPLAY_PHOTOCD 0xB0	DiscManager	0xD0C4
F0C5	D) VCD/CD: Prohibited due to CD-ROM without CD-DA	PCND_NOPLAY_CDROM 0xC0	DiscManager	0xD0C5

14.6. Mode Table 2

Following modes are available with combinations of the pressed buttons on the player and on the remote controller unit.

Item	Operational Condition and Key Function	Details	Display	To I
Jitter display	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button, “5” on theremote controller unit.	Jitter display / Measures and displays jitter. Measurement is repeated every second. Read error counter starts at 0 at the mode setting, and increased by one as data read fails at target block. A small defect isallowed to correct by retry. Any possibility is counted as one increment. Repetitive errors after retry increase by two levels or more.	J*1 xxx*2 _yyy*3 _zz*4 / / *1 : Jitter display mode / *2 : Jitter measurement value / *3 :Read error counter / *4 : Focus driving value Values are shown to one decimal place in the decimal digit.Focus driving value is displayed in the hexadecimal digit.	Pre STO OPE

Item	Operational Condition and Key Function	Details	Display	To
Error code display	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button, “0” on theremote controller unit.	Error code display / Displays the latest error code stored in EEPROM.	DVDnn_F--- / *nn: Error history / *--: Error number	Auto exits mod five
Measurement of laser current electricity initialization value	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the ▮▮ button on the remote controller unit.	Measurement of laser current electricity initialization value / Memorizes each initialization value of DVD and CD in EEPROM.	LDO*1 _039*2 _027*3 / / *1 : Laser current electricity measurement mode / *2 : DVD current electricity value / *3 :CD current electricity value Values are shown in the decimal digit. The above example indicates that the current electricity initialization value is 34mA at DVD laser and 28mA at CD laser when laser is turned on.	Auto exits mod five
Measurement of DVD laser current electricity	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the DISPLAY button on the remote controller unit.	Measurement of DVD laser current electricity / Measures DVD laser current electricity and displays the result together with the initialization value stored in EEPROM. After measurement, DVD laser is lit tillthe power is turned off (or goes off when the primary power is turned off).	LDD*1 _034*2 _032*3 / / *1 : DVD laser current electricity measurement mode / *2 : Current electricity initializationvalue stored in EEPROM / *3 : Present value of current electricity Values are shown in the decimal digit. The above example indicates that the current electricity initialization value is 34mA and its present valueis 32mA.	Auto exits mod five

Item	Operational Condition and Key Function	Details	Display	To
ADSC internal RAM display	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button “1” or “2” onthe remote controller unit.	ADSC internal RAM display / Reads and displays the RAM value inside ADSC. The address is renewed when the CLEAR key is pressed so that the values at eleven points appear.	A*1 _FBo*2 _0000*3 / / *1 : ADSC internal RAM display mode / *2 : Address / *3 : RAM value atdisplayed address Values are shown in the hexadecimal digit. The above example indicates that ADSC value at the address, 0FAh is 6901h.	Pres STO OPE
Measurement of CD laser current electricity	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button “3” onthe remote controller unit.	Measurement of CD laser current electricity / Measures CD laser current electricity and displays the result together with the initialization value stored in EEPROM. After measurement, CD laser is lit tillthe power is turned off (or goes off when the primary power is turned off).	LDC*1 _028*2 _026*3 / / *1 : CD laser current electricity measurement mode / *2 : Current electricity initializationvalue stored in EEPROM / *3 : Present value of current electricity Values are shown in the decimal digit. The above example indicates the current electricity initialization value is 28mA and its present value is 26mAwhen laser is turned on.	Autc exits mod five
User initialization	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button ≧10 on the remote controller unit.	User initialization / The user setting recovers the factory setting.	“INITIALIZE”	Non

Item	Operational Condition and Key Function	Details	Display	To
Region display	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button, “6” onthe remote controller unit.	Region display	[srrrxxyzzzz] / / s : Panecon model type / rrr : Panecon release number / x : Syscon generation (45) / y: Syscon model type / zzz: Syscon release number	Auto exits mod five
Firm version display	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button, “7” on theremote controller unit.	Firm version display	rrr*1 _xx*2 y*3 zzz*4 / / *1 : Panel computer release number / *2 : System computer generation / *3 : System computer model type / *4 : System computer release number	Auto exits mod five
Region and firm display	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button, “8” on theremote controller unit.	Region and firm version display	_r*1 __xx*2 y*3 zzz*4 / / *1 : Region number / *2 : System computer generation / *3 : System computer model type / *4 : System computer release number	Auto exits mod five

Item	Operational Condition and Key Function	Details	Display	To
Laser use time	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the ▲ button on the remote controller unit.	Laser usage time / Measures each for DVD and CD respectively.	T_1234_5678 / / The numbers in the left show usage time for DVD laser and those in the right for CD laser. The four-digit number is shown by the ten hours in the decimal digit. The number after 0000 is 9999.	Auto exits mod five
Reset laser use time	While the usage time 1 is displayed, press and hold down the ■ button on the player and the ▼ button on the remote controller unit.	Laser usage time reset / Resets both for DVD and CD at once.	T_0000_0000	Auto exits mod five
Spindle use time	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the ▶ button on the remote controller unit.	Spindle motor usage time	T___0000_0000 / / The four-digit number is shown by the ten hours in the decimal digit. The number after 0000 is 9999.	Auto exits mod five

Item	Operational Condition and Key Function	Details	Display	To I
Reset spindle use time	While the usage time 2 is displayed, press and hold down the ■ button on the player and the ◀ button on the remote controller unit.	Usage time 2 reset / Spindle motor usage time	T2_0000	Autc exits mod five
Communication error display /	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the MENU button on the remote controller unit.	Displays frequency of communication errors between system computer firm IC and mechanical computer IC during DVD module.	-ERR_00/30	Autc exits mod five

14.7. Tray Lock Function

14.7.1. Setting

- Disc Lock Function

1. **With the SELECTOR on DVD/CD and POWER ON, hold down the [■ STOP] KEY on the main unit, and then press the [POWER] KEY on the remote control for 3 seconds to enter toLock mode A.[_ _ _LOCKED_] will be displayed for 3 seconds, and then current disc will begin playing.**
2. **In Lock mode A, the following key is disabled. [OPEN/CLOSE]**

- Operation Lock Function

1. **With the SELECTOR on DVD/CD and POWER ON, hold down the [CD PLAY] KEY on the main unit, and then press the [POWER] KEY on the remote control for 3 seconds to enter Lock mode B. [_ _ _ LOCKED_] will be displayed for 3 seconds, and the current**

disc will begin playing.

2. Lock mode B primarily controls the selector and disc operations, and disenables for the following keys.

Note:

OPEN/CLOSE ⏏ button are invalid and the player displays "___LOCKED_" while the lock function mode is entered.

- Prohibiting operation of selector and disk

1. Select the DVD/CD function.
2. Press and hold down the ▶ button on the player and the power button on the remote controller unit for at least three seconds. (The message, "___LOCKED_" appearswhen the function is activated.)

Note:

The following buttons are invalid and the player displays "___LOCKED_" while the lock function mode is entered.

Main unit: STOP, PAUSE, PLAY, OPEN/CLOSE, |◀◀, ▶▶|, ◀◀, ▶▶,

Remote control: TIMER, DISC, GROUP, PAGE, DISPLAY, AUX, QUICK REPLAY, CH SELECT, TEST, DVD/CD, STOP, PAUSE, |◀◀, ▶▶|, ◀◀, ▶▶, RETURN, TV VOL +.

14.8. Things to Do After Repair

Follow the procedure described below after repair.

1. While the power is on, press the ⏏ button to close the tray.
2. Press the power button to turn off the power.
3. Unplug the power cable.

Note:

It is prohibited to unplug the power cable while the tray is opened and to close the tray manually.

15. Adjustment Procedure

15.1. Required Tools and Equipment

15.1.1. Usage Equipment

Purpose of Use	Tools/Equipment	Model/Product Number
Tilt adjustment	DVD test disc	DVDT-S15 or DVDT-S01
	Hexagonal wrench`	Available on the market (2mm)
Others	Screw lock	RZZ0L01
	Grease	RFKXGAK152, RFKXPG641
Checking	CD test disc	PVCD-K06 and any commercially available disc
	VCD test disc	
	Recovery disc	PFKZD5TR006 or RFKZD03R004

15.1.2. Necessity of Adjustment

15.1.2.1. Necessity of Optical Adjustment

- Before starting optical system adjustment, be sure to wear proper protection gear against static electricity.
- Optical adjustment (optical pickup tilt adjustment) is required after following parts are replaced:
  1. Optical pickup
  2. Spindle motor assembly
  3. Optical pickup peripherals such as a rail, etc.

Note:
Optical adjustment is not necessary after replacement of other parts inside traverse, however, may require when picture deterioration is detected. Optical adjustment cannot be applied to the inside of optical pickup. When a traverse unit is replaced,the adjustment is not necessary.

15.1.3. Storing and Handling Test Discs

Surface precision is vital for DVD test discs. Be sure to store and handle them carefully.

- Do not leave the discs uncovered on the work desk or other places after use.
- Handle the discs carefully to prevent scratches. Put each disc in its case and place it in the standing position. Store the discs in a cool place and avoid direct sunlight or air conditioner.
- Accurate adjustment cannot be expected with a disc warped against a flat surface. Obtain a new test disc for optical adjustment.

- If a warped disc is used, adjustment would result incorrectly, and other discs could not be used.

15.1.4. Optical Adjustment (Optical Pickup Tilt Adjustment)

Measurement point	Adjustment point	Mode	Disc
	Tangential adjustment screw / Tilt adjustment screw	T1 (inner track) replay / T43 (outer track) replay	DVDT-S15 or DVDT
Measuring equipment		Adjustment value	
None (LCD display of the player is used.)		Adjust that jitter value becomes minimum.	

15.1.4.1. Adjustment Procedure

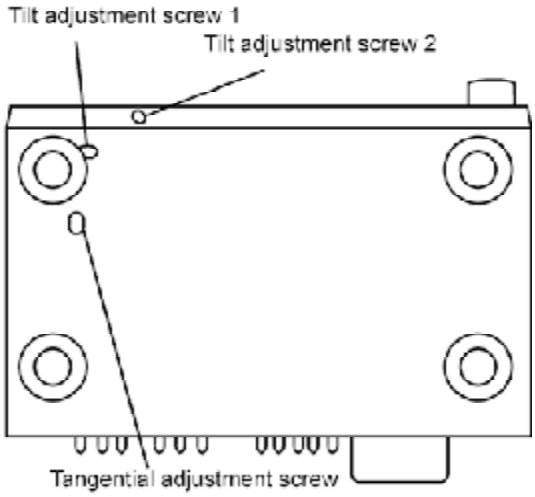
1. While the player is stopped and no disc is inserted, select the DVD function. Press and hold down the ■ button on the player and the number button, “5” on theremote controller unit.
2. Check that “J_xxx_yyy_zz” is appearing on the display.

For your information:
The values, “yyy” and “zz” are not associated to jitter value. / “yyy” indicates the frequency of error occurrence. / “zz” indicates the focus drive value.

Note:
Jitter value appears on the display.

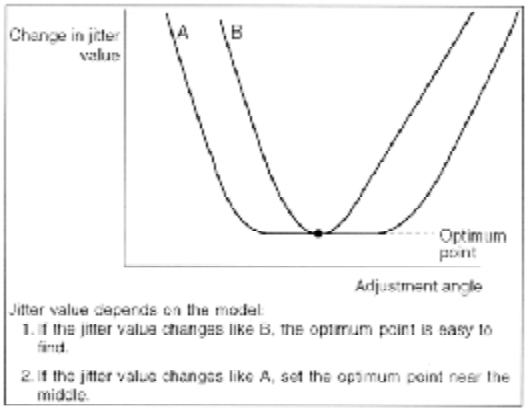
3. Replay T01 (inner track) of the test disc.
4. Adjust till the jitter value becomes minimum, using a tangential adjustment screw. <Fig. 15-1>
5. Replay T43 (outer track) of the test disc.
6. Adjust till the jitter value becomes minimum, using a tilt adjustment screw 1. <Fig. 15-1>
7. Replay T43 (outer track) of the test disc.
8. Adjust till the jitter value becomes minimum, using a tilt adjustment screw 2.<Fig. 15-1>
9. Adjust till the jitter value becomes, using the tilt adjustment screws 1 and 2 alternatively.

Fig. 15-1



15.1.4.2. Tips

1. **Apply the tangential adjustment first and then the tilt adjustment.**
2. **Repeat the adjustment a couple of times to find the optimum point.**
3. **Complete with the tilt adjustment.**


Change in jitter value
A
B
Optimum point
Adjustment angle
Jitter value depends on the model.
1. If the jitter value changes like B, the optimum point is easy to find.
2. If the jitter value changes like A, set the optimum point near the middle.

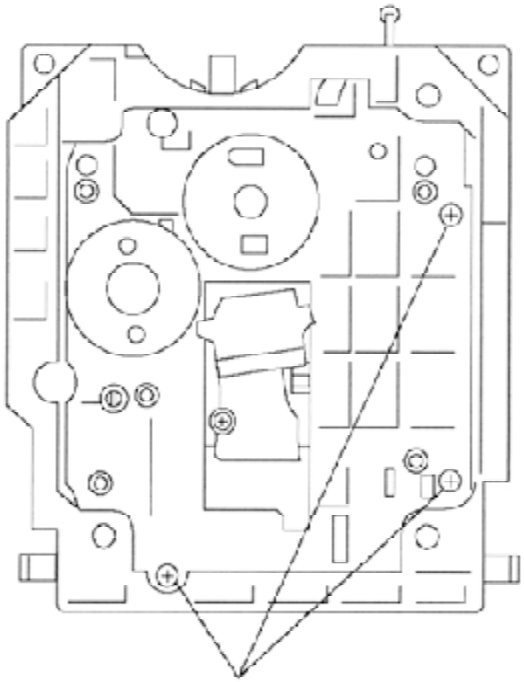
15.1.4.3. Check After Adjustment

Replay test discs or other commercial discs in order to confirm that no picture deterioration or sound skipping is detected in the inner, middle, and outer tracks. After this, fasten each adjustment screw securely using a screw lock.

15.1.4.4. Procedure for Screw Lock

1. **After adjustment, remove the top cover, clamper base, disc tray and then traverse unit.**
2. **Place the traverse unit upside down, and fasten the adjustment screws with a screw lock. <Fig. 15.2>**
3. **After fastening the screws, assemble in order of the traverse unit, disc tray, clamper base, and then top cover.**

Fig. 15-2



16. Illustration of IC's, Transistors and Diodes

17. Terminal Function of IC's

17.1. IC601 (C2BBGF000463) System Control

Pin No.	Mark	I/O	Function
1	D5_LED	I/O	Disc 5 LED Control. Active H.
2	D4_LED	I/O	Disc 4 LED Control. Active H.
3	D3_LED	I/O	Disc 3 LED Control. Active H.
4	D2_LED	I/O	Disc 2 LED Control. Active H.
5	D1_LED	I/O	Disc 1 LED Control. Active H.
6	Region	I/O	DVD region setting
7	KEY2	I/O	Key 2 input
8	KEY1	I/O	Key 1 input
9	JOG1B	I/O	JOG 1 INPUT B. Main Volume.

Pin No.	Mark	I/O	Function
10	JOG1A	I/O	JOG 1 INPUT A. Main Volume.
11	MIC_VOL	I/O	MIC VR AD input
12	DSPRST	I/O	DSP reset output.
13	DSPACK	I/O	DSP ACK input.
14	SENSE	I/O	DSP sense input.
15	PHONE	I/O	SW input for PHONE SW detection. L: without PHONE/ H:with PHONE
16	MIC SW	I/O	SW input for MIC detection. L: without MIC / H: with MIC
17	VSS	-	GROUND (VPP power input during FLASH)
18	RESET	I	Reset input. Active L.
19	N.C.	L	OPEN or GND with Resistor
20	N.C.	L	OPEN or GND with Resistor
21	VSS	-	GROUND (0V)
22	XIN	I	4.00MHz Main Clock.
23	XOUT	O	4.00MHz Main Clock.
24	VCC	-	Power Supply. (+5V)
25	EDA	I/O	EEPROM data output
26	ECK	I/O	EEPROM clock output
27	PCNT	I/O	PCNT output. Power control output.
28	DCDET	I/O	DCDET input. DC power detection input.
29	RDS CLK	I/O	RDS clock input
30	RDS DATA	I/O	RDS data input
31	RMT	I/O	REMOCON input. Remote control input
32	SYNC	I/O	AC failure DET input. Synchronized input for detection of power failure
33	SER4	I/O	Serial 4 output
34	SER3	I/O	Serial 3 output
35	SER2	I/O	Serial 2 output
36	SER1	I/O	Serial1 output
37	SER 5	I/O	Serial 5 output (ECHO CS)
38	ECS	I/O	EEPROM CS output

Pin No.	Mark	I/O	Function
39	N.C.	-	OPEN or GND or GND with Resistor
40	N.C.	-	OPEN or GND or GND with Resistor
41	N.C.	-	OPEN or GND or GND with Resistor
42	N.C.	-	OPEN or GND or GND with Resistor
43	SD IN	I/O	Tuner signal DET input
44	DO/ST	I/O	Tuner DO/ST input
45	WAKE LED	I/O	WAKE UP display LED control. Active H
46	N.C.	I/O	OPEN or GND or GND with Resistor
47-54	GRID8-GRID1	I/O	Grid drive output (Digit drive output)
55-80	AND34-AND9	I/O	Segment drive output (Anode drive output)
81-88	AND8(REG8) - AND1(REG1)	O	Segment drive output (Anode drive output) Control output for regional area, function selection
89	-VP	-	Power (-30V)
90	MECHSI	I/O	Mecha control data input (Communication with DVD mechanical controls
91	MECHSO	I/O	Mecha control data output (Communication with DVD mechanical controls
92	MECHCK	I/O	Mecha control clock input (Communication with DVD mechanical controls
93	MECHRQ	I/O	Mecha con request output (Communication with DVD mechanical controls
94	MECHCS	I/O	Mecha control CS input (Communication with DVD mechanical controls

Pin No.	Mark	I/O	Function
95	MECRST	I/O	Mechon reset output (Communication with DVD mechanical controls
96	REG_IN	I/O	Region input (Input setting for regional area, Function)
97	AVSS	-	Power Jack (0V) AD Converter GROUND
98	VREF	-	Reference For A-D (+5V)
99	N.C.	I/O	OPEN or GND with Resistor
100	CRT	I/O	CR timer control. Power failure time detection.

17.2. IC451 (C2BBFD000307) Mecha Control

Pin No.	Mark	I/O	Function
1	VCC	I	Power connection terminal
2	VREF	I	Standard voltage input terminal
3	AVSS	-	Standard voltage input terminal (connected to GND)
4	MUTE	O	Mute control output terminal
5	PWCONT	O	DVD module power control output terminal
6	SYNC	I	Power disruption detection signal input terminal
7	C/ SW_OUT	-	Not used, Open
8	B_REQ	I	Serial transmission request signal input terminal
9	B_CS	O	Serial transmission chip select signal output terminal
10	B_CLK	O	Serial transmission clock signal output terminal
11	DATA O	O	Serial transmission data signal output terminal

Pin No.	Mark	I/O	Function
12	DATA I	I	Serial transmission data signal output terminal
13	CLS	O	Tray close signal output terminal
14	OPN	O	Tray open signal output terminal
15	CNVSS	-	Power input terminal (connected toGND through resistor)
16	TEST	I	Test mode signal input terminal
17	ECS	-	Serial signal output terminal to EEPROM (not used, open)
18	REST	I	Reset signal input terminal
19	XIN	I	Crystal oscillator circuit input terminal (=8MHz)
20	XOUT	O	Crystal oscillator circuit output terminal (=8MHz)
21	VSS	-	Power input terminal (connected to GND)
22	LED_STB	-	Serial signal output terminal to LED driver (not used, open)
23	LED/ E_CLK	-	Serial signal output terminal to EEPROM driver (not used, open)
24	LED/ E_DTA	I/O	Serial signal input/ output terminal to LED driver (connected to GND through resistor)
25	LED_CLR	_	Latch clear signal output terminal to LED driver (not used, open)
26	PLG	O	Plunger control signal output terminal
27	SW5	I	Bottom switch detection signal input terminal
28	PSTN	I	Position sensor detection signal input terminal
29	SW2	I	Tray position 2 detection switch input terminal

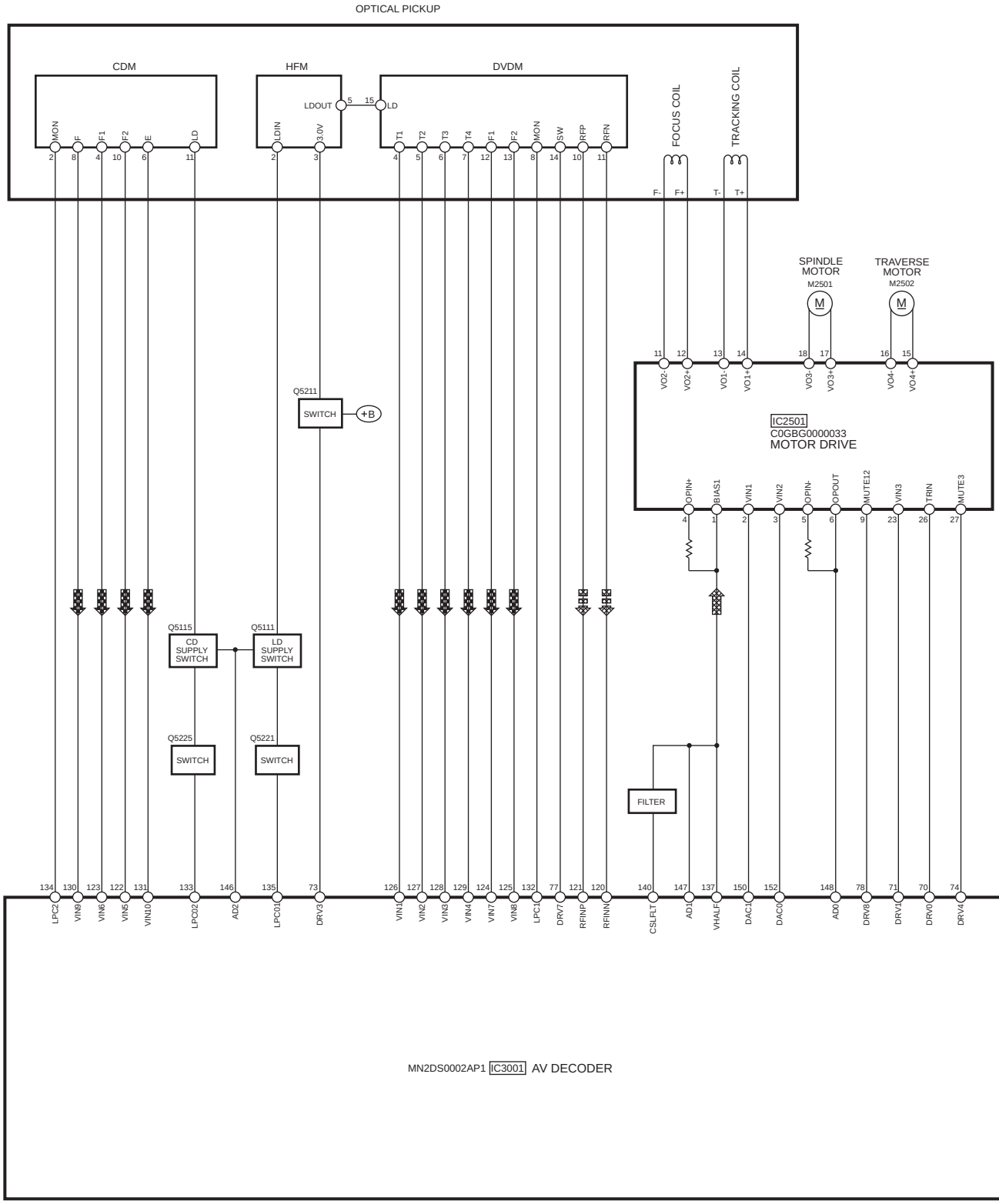
Pin No.	Mark	I/O	Function
30	SW1	I	Tray position 1 detection switch input terminal
31	SW3	I	Tray open detection switch input terminal
32	CCW	O	Motor drive control signal output terminal (normal rotation)
33	HALF	O	Motor drive control signal output terminal (speed)
34	CW	O	Motor drive control signal output terminal (reverse rotation)
35	DVD_CLK	I	Serial transmission clock signal input terminal to DVD module
36	DVD_CMD	I	Serial transmission command signal input terminal to DVD module
37	DVD_STAT	I	Serial transmission status signal input terminal to DVD module
38	SEL 5/1	I	Connected to GND through resistor
39	SW4	I	Clamp switch detection signal input terminal
40	KEY2	-	Operation key 2 signal input terminal (connected to GND)
41	KEY1	-	SOperation key 1 signal input terminal (connected to GND)
42	CSEL	I	Chip select signal input terminal (connected to GND through resistor)

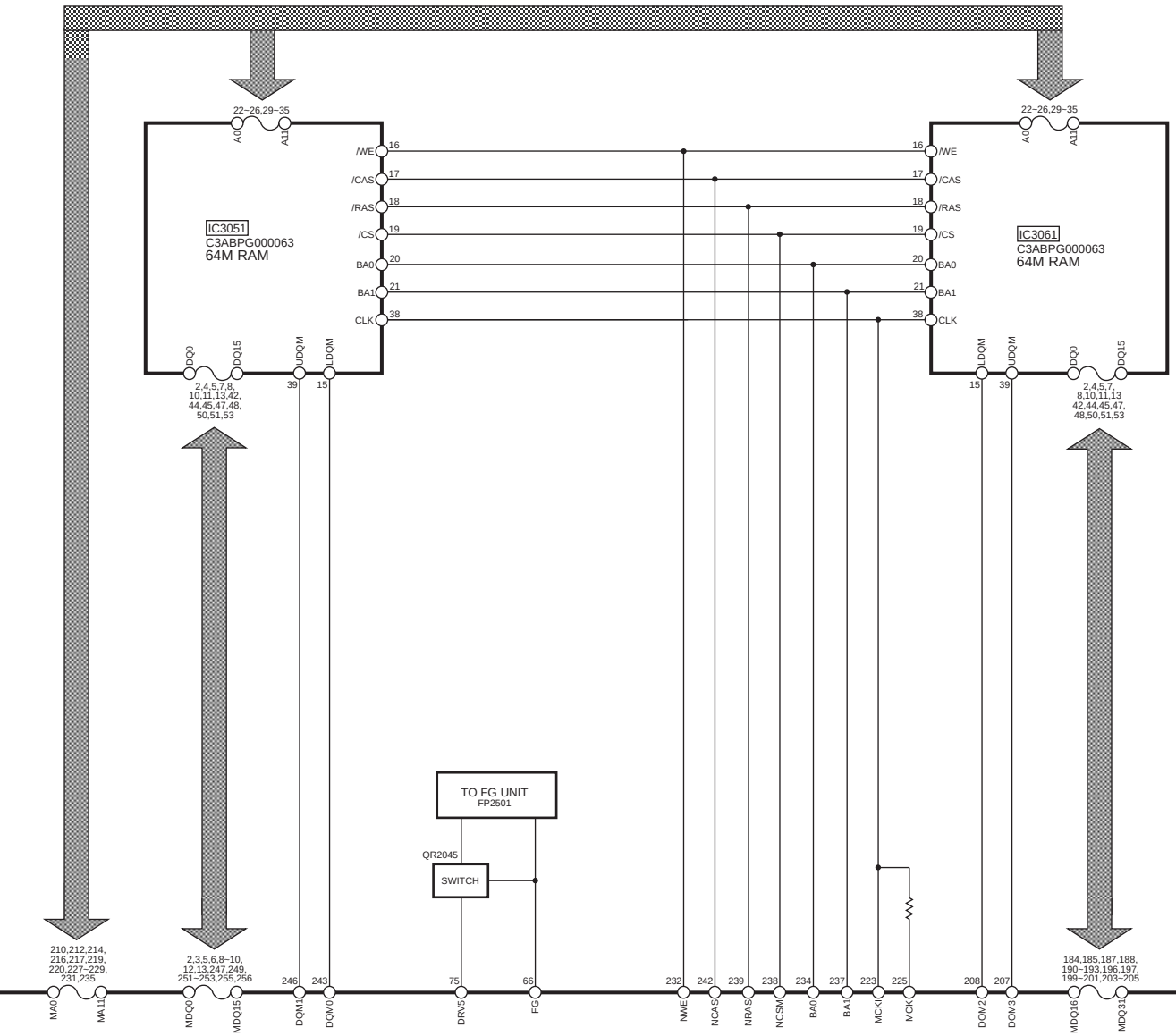
18. Block Diagram

19. Schematic Diagram

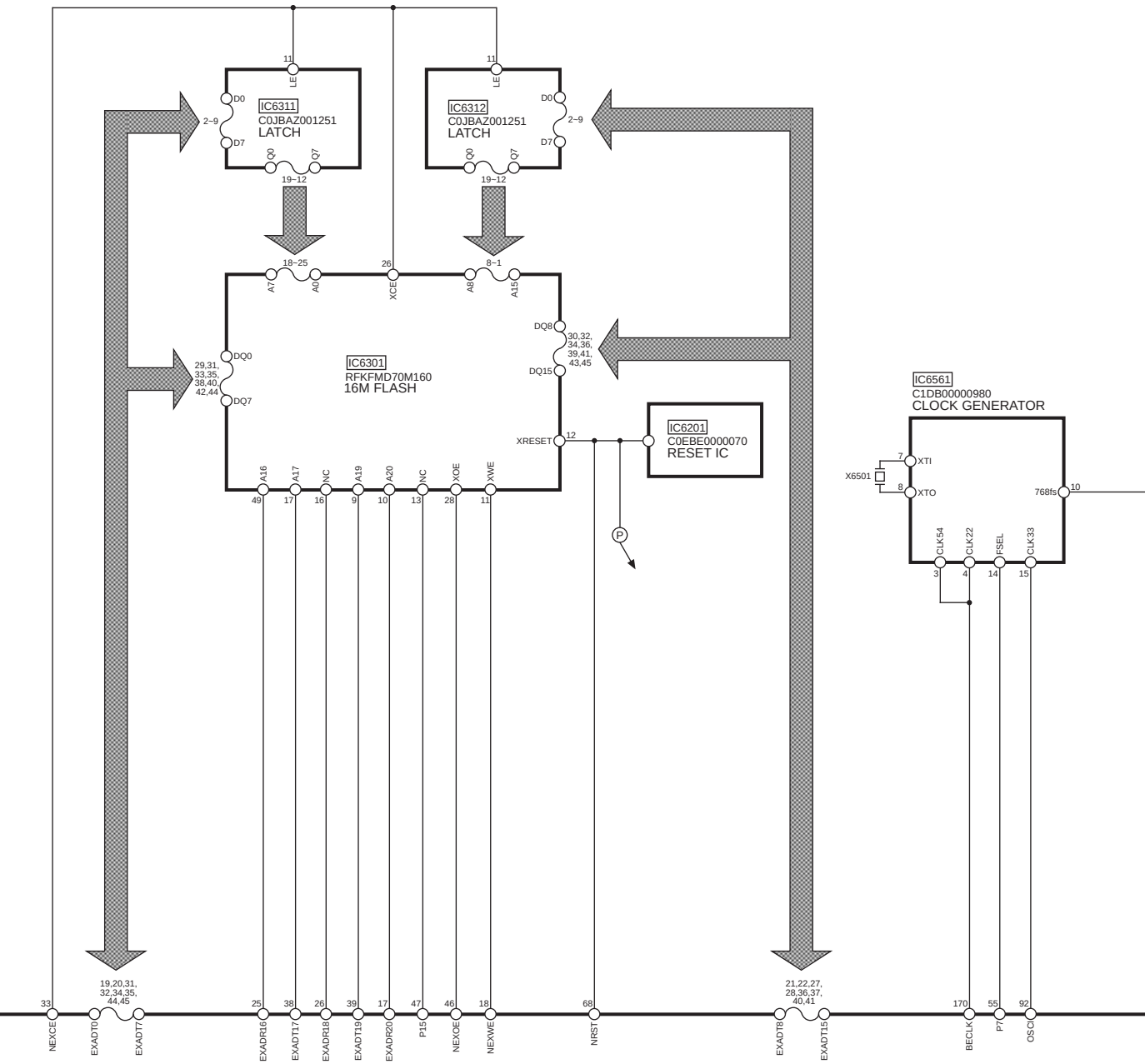
(All schematic diagrams may be modified at any time with the development of the new technology)

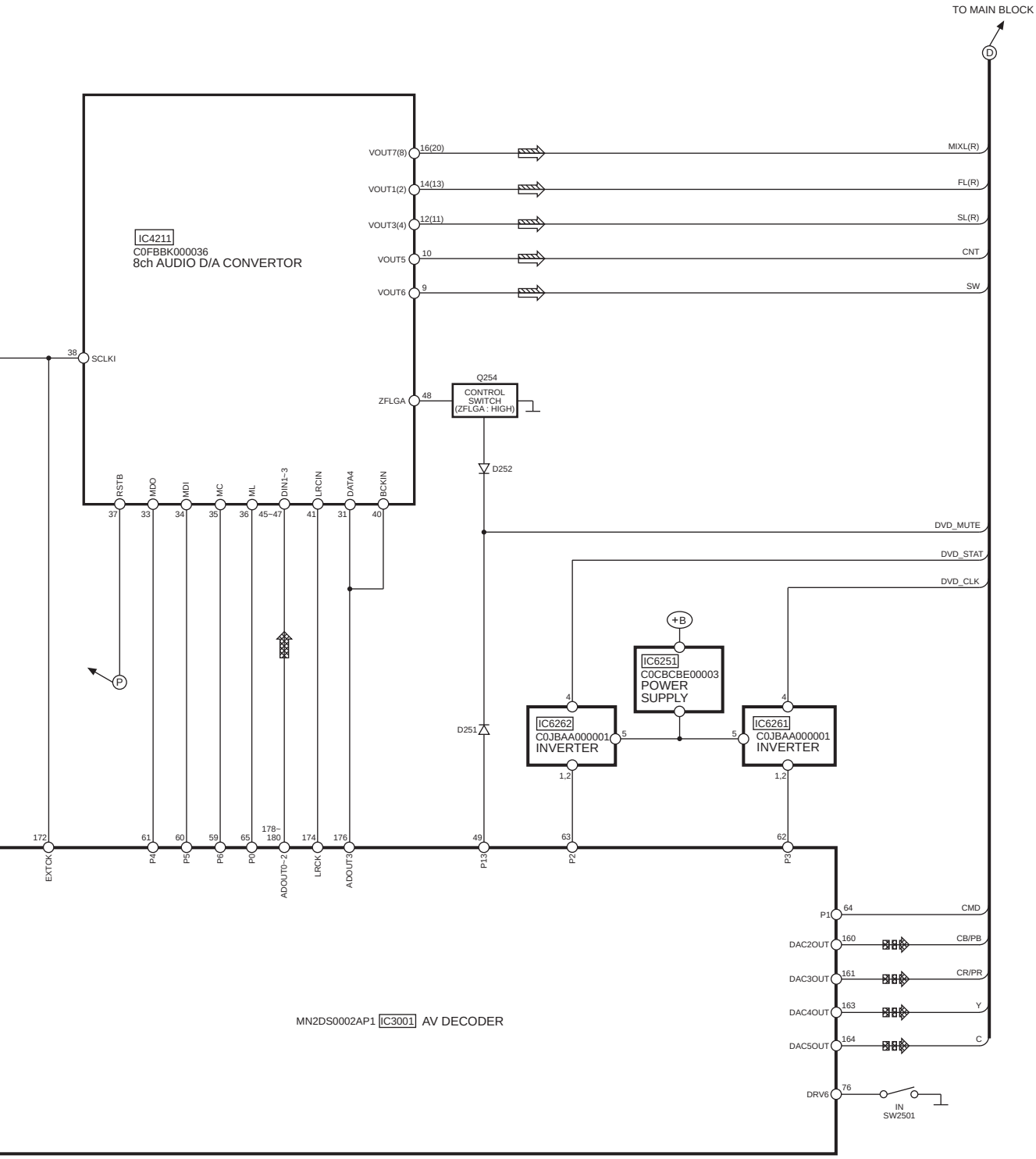
Note:

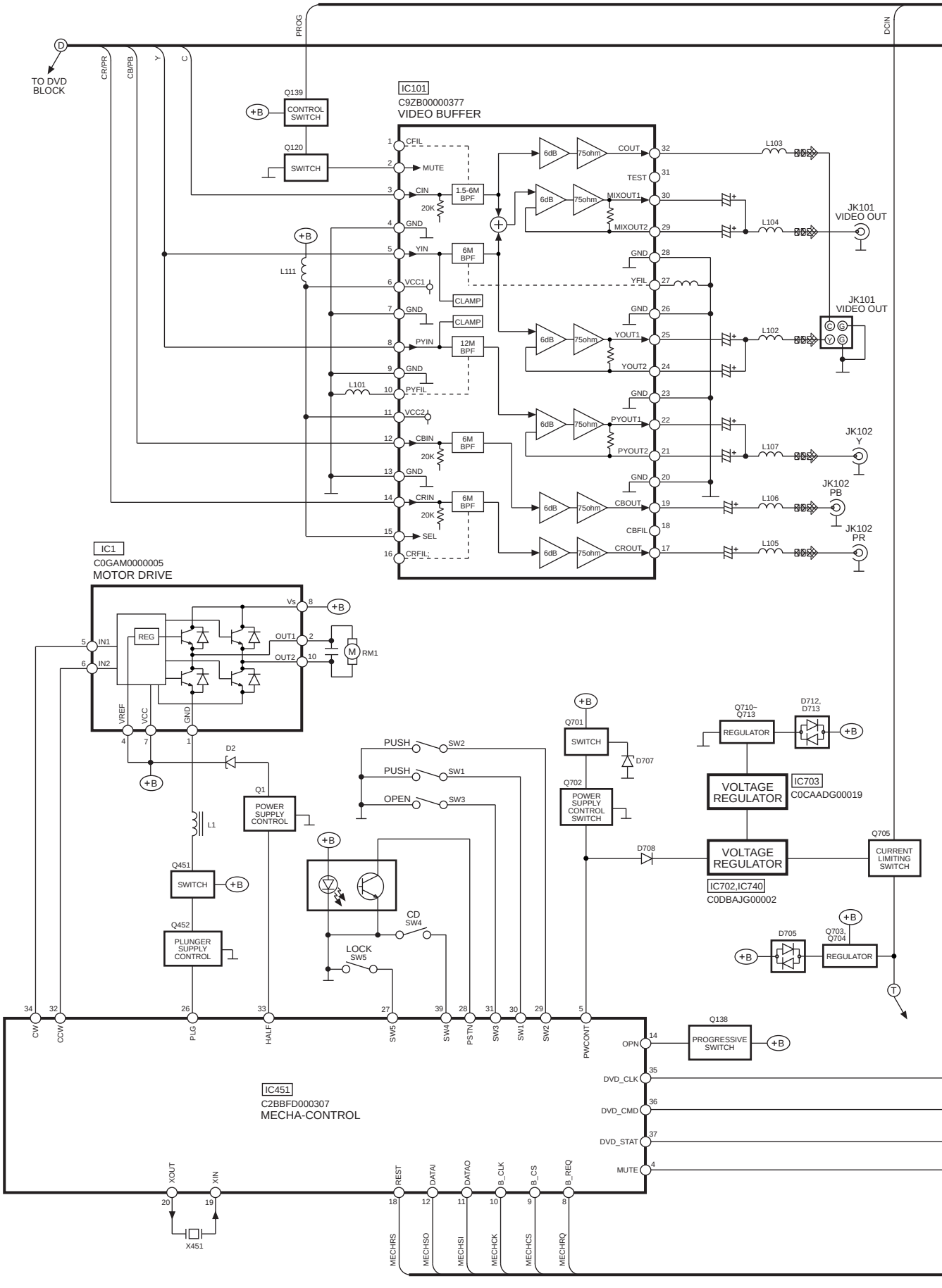

OPTICAL PICKUP
CDM
HFM
DVDM
MON
IF
F1
F2
E
LD
LDOUT
LDIN
3.0V
T1
T2
T3
T4
F1
F2
MON
SW
RFP
RFN
FOCUS COIL
TRACKING COIL
F-
F+
T-
T+
SPINDLE MOTOR
M2501
TRAVERSE MOTOR
M2502
VO2-
VO2+
VO1-
VO1+
VO3-
VO3+
VO4-
VO4+
IC2501
C0GBG0000033
MOTOR DRIVE
OPIN+
BIAS1
VIN1
VIN2
OPIN-
OPOUT
MUTE12
VIN3
TRIN
MUTE3
Q5211
SWITCH
+B
Q5115
CD SUPPLY SWITCH
Q5111
LD SUPPLY SWITCH
Q5225
SWITCH
Q5221
SWITCH
FILTER
LPC2
VIN9
VIN6
VIN5
VIN10
LPC02
AD2
LPC01
DRV3
VIN1
VIN2
VIN3
VIN4
VIN7
VIN8
LPC1
DRV7
RFINP
RFINN
CSLFLT
AD1
VHALF
DAC1
DAC0
AD0
DRV8
DRV1
DRV0
DRV4
MN2DS0002AP1 IC3001 AV DECODER

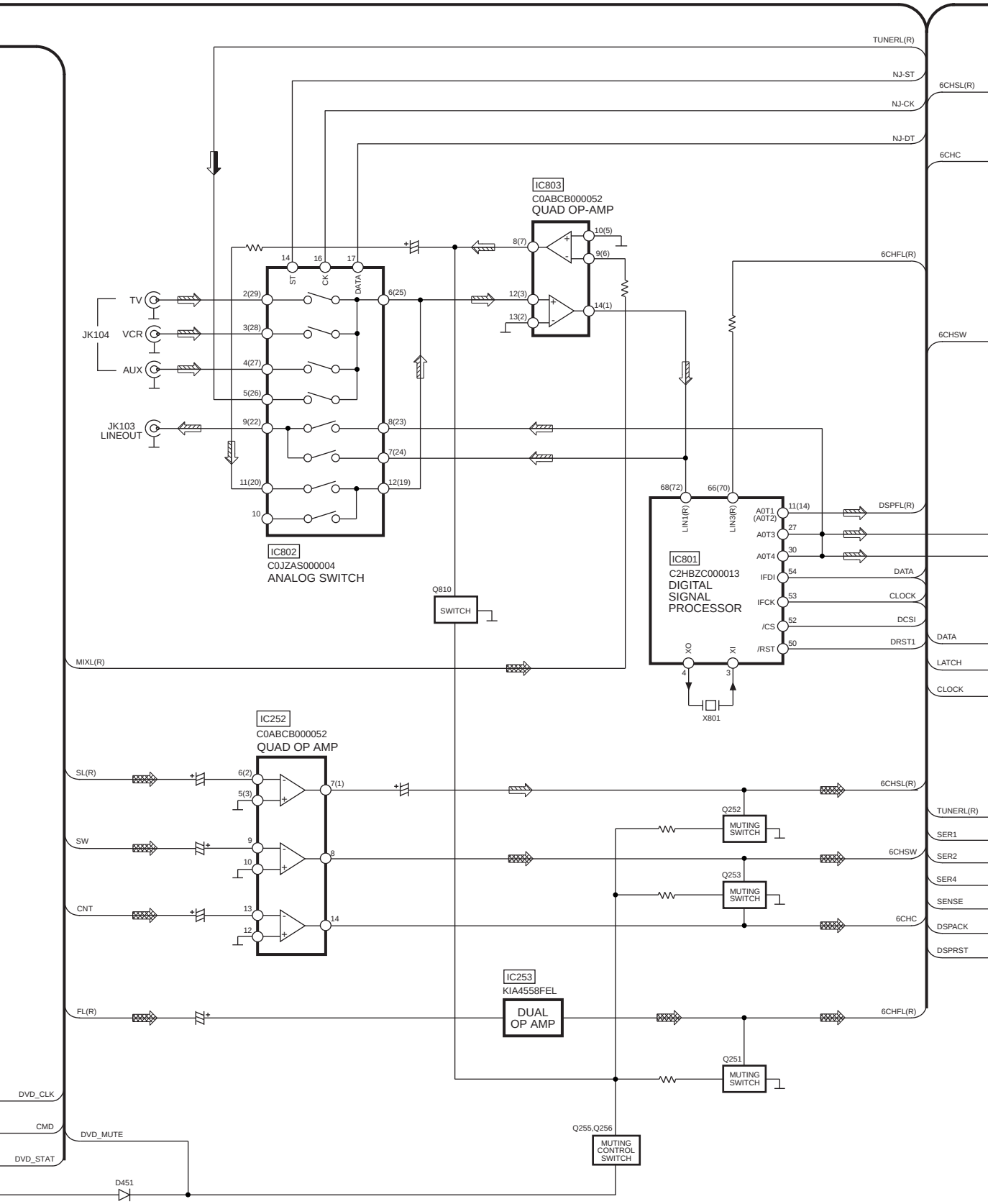


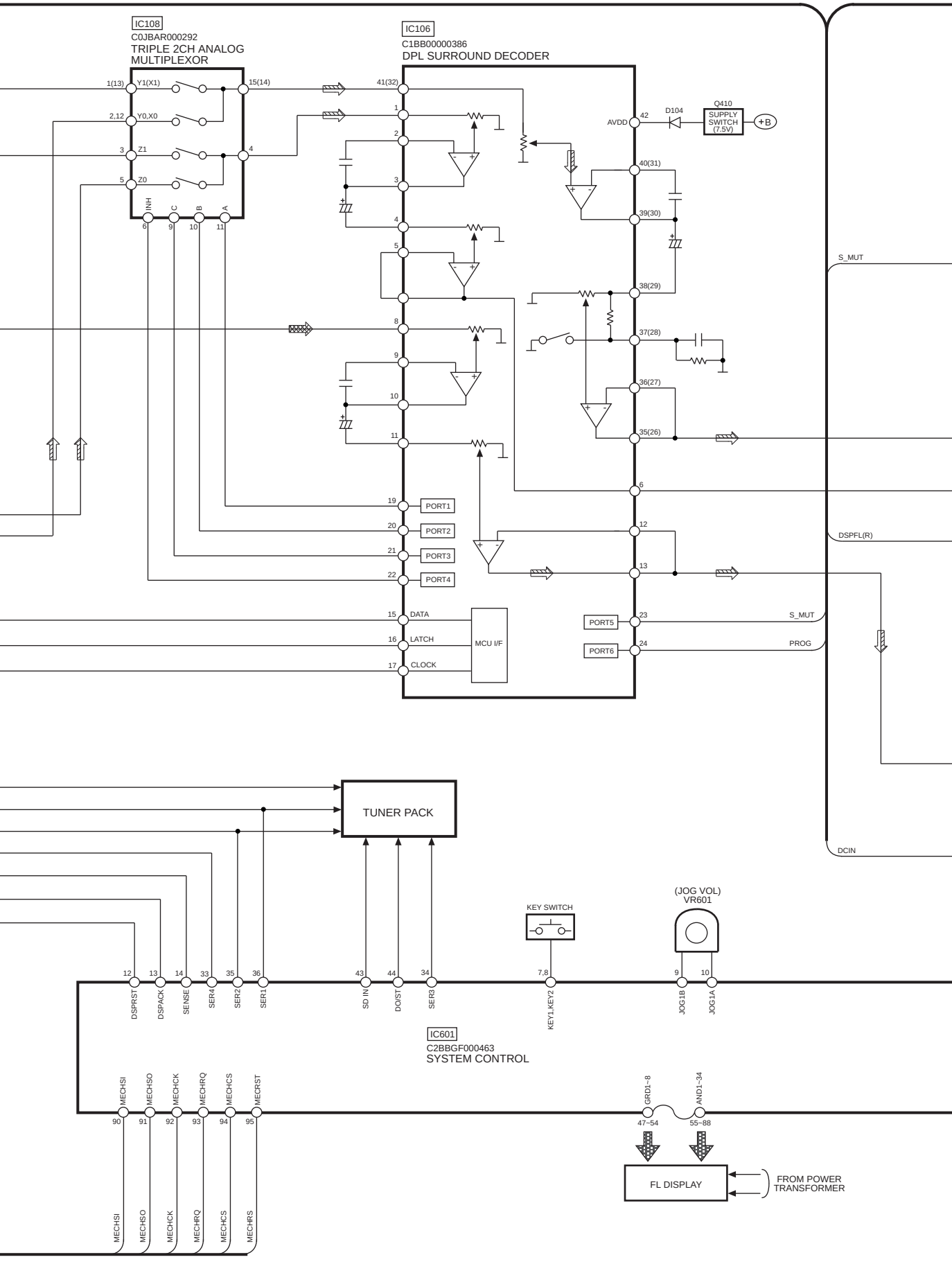
MN2DS0002AP1 IC3001 AV DECODER

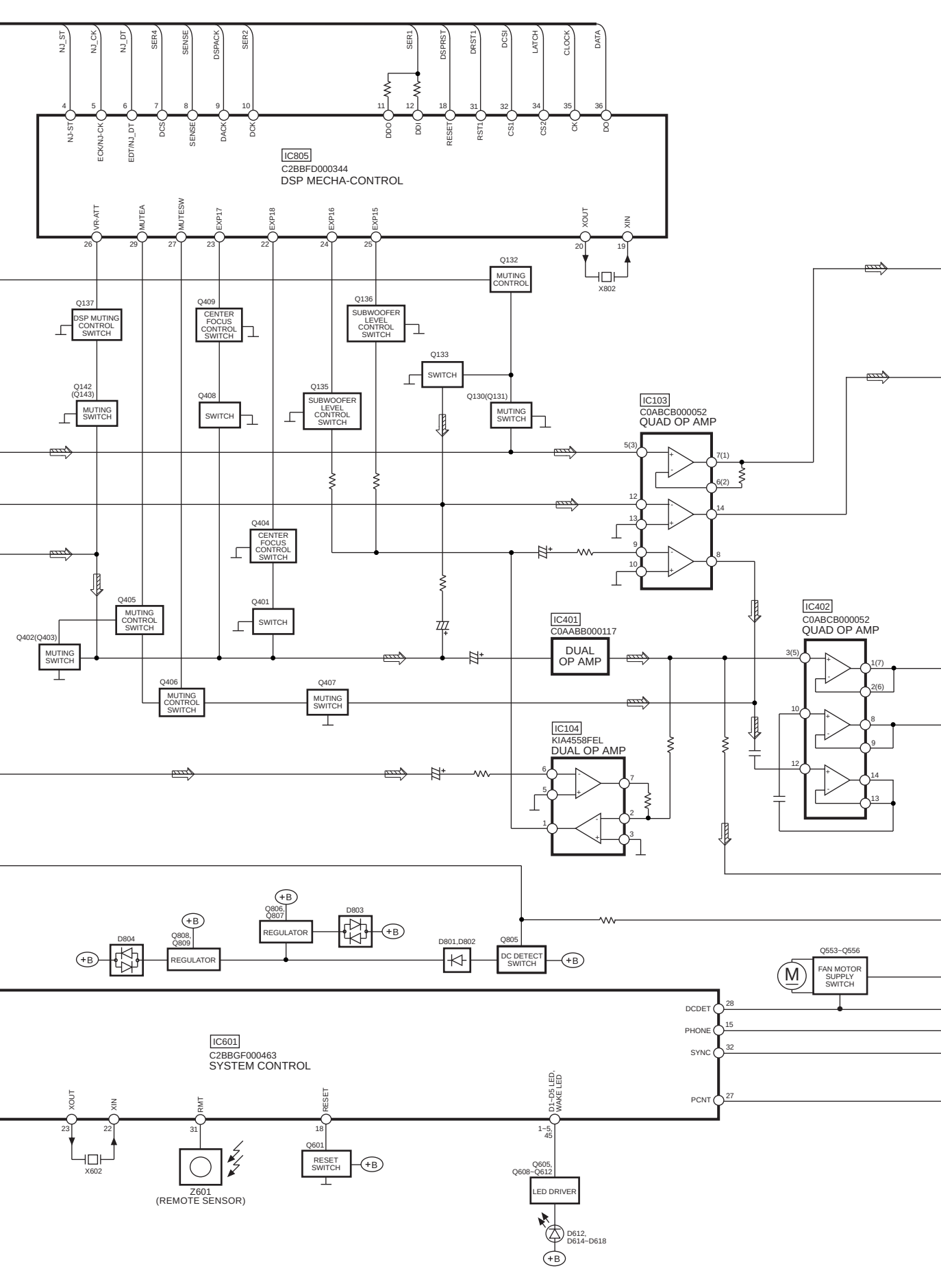

IC6311
C0JBAZ001251
LATCH
IC6312
C0JBAZ001251
LATCH
IC6301
RFKFMD70M160
16M FLASH
IC6201
C0EBE0000070
RESET IC
IC6561
C1DB00000980
CLOCK GENERATOR
X6501
768fs
LE
D0
D7
Q0
Q7
XCE
XRESET
XWE
XOE
NC
XTI
XTO
CLK54
CLK22
FSEL
CLK33
NEXCE
EXADT0
EXADT7
EXADR16
EXADT17
EXADR18
EXADT19
EXADR20
P15
NEXOE
NEXWE
NRST
EXADT8
EXADT15
BECLK
P7
OSCI

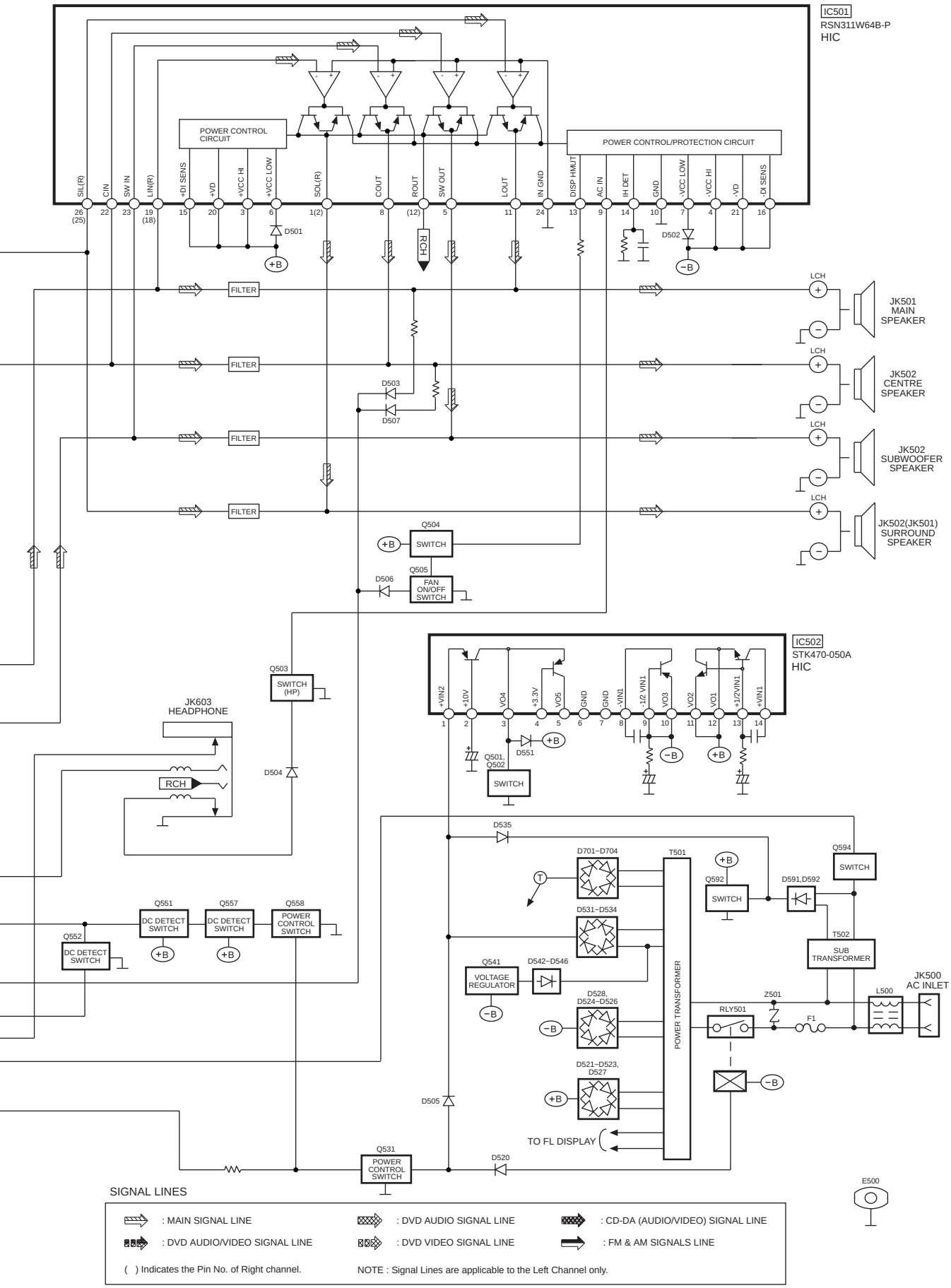

TO MAIN BLOCK
D
IC4211
C0FBBK000036
8ch AUDIO D/A CONVERTOR
VOUT7(8)
16(20)
MIXL(R)
VOUT1(2)
14(13)
FL(R)
VOUT3(4)
12(11)
SL(R)
VOUT5
10
CNT
VOUT6
9
SW
38
SCLKI
ZFLGA
48
Q254
CONTROL SWITCH (ZFLGA : HIGH)
D252
RSTB
MDO
MDI
MC
ML
DIN1~3
LRCIN
DATA4
BCKIN
37
33
34
35
36
45~47
41
31
40
DVD_MUTE
DVD_STAT
DVD_CLK
+B
IC6251
C0CBCBE00003
POWER SUPPLY
IC6262
C0JBAA000001
INVERTER
IC6261
C0JBAA000001
INVERTER
D251
4
5
1,2
P
172
61
60
59
65
178~180
174
176
49
63
62
EXTCK
P4
P5
P6
P0
ADOUT0~2
LRCK
ADOUT3
P13
P2
P3
P1
64
CMD
DAC2OUT
160
CB/PB
DAC3OUT
161
CR/PR
DAC4OUT
163
Y
DAC5OUT
164
C
DRV6
76
IN
SW2501
MN2DS0002AP1
IC3001
AV DECODER

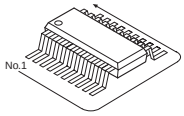

PROG
DCIN
D
TO DVD BLOCK
CR/PR
CB/PB
Y
C
IC101
C9ZB00000377
VIDEO BUFFER
Q139
CONTROL SWITCH
+B
Q120
SWITCH
CFIL
MUTE
CIN
20K
1.5-6M BPF
GND
YIN
6M BPF
L111
VCC1
CLAMP
GND
CLAMP
PYIN
12M BPF
GND
L101
PYFIL
VCC2
CBIN
6M BPF
20K
GND
CRIN
6M BPF
20K
SEL
CRFIL
6dB
75ohm
COUT
TEST
MIXOUT1
MIXOUT2
GND
YFIL
GND
YOUT1
YOUT2
GND
PYOUT1
PYOUT2
GND
CBOUT
CBFIL
CROUT
L103
L104
L102
L107
L106
L105
JK101 VIDEO OUT
JK101 VIDEO OUT
JK102 Y
JK102 PB
JK102 PR
IC1
C0GAM0000005
MOTOR DRIVE
REG
IN1
IN2
OUT1
OUT2
RM1
Vs
VREF
VCC
GND
D2
L1
Q1
POWER SUPPLY CONTROL
Q451
SWITCH
Q452
PLUNGER SUPPLY CONTROL
PUSH SW2
PUSH SW1
OPEN SW3
CD SW4
LOCK SW5
Q701
SWITCH
D707
Q702
POWER SUPPLY CONTROL SWITCH
D708
Q710– Q713
REGULATOR
D712, D713
VOLTAGE REGULATOR
IC703
C0CAADG00019
VOLTAGE REGULATOR
IC702,IC740
C0DBAJG00002
Q705
CURRENT LIMITING SWITCH
D705
Q703, Q704
REGULATOR
T
CW
CCW
PLG
HALF
SW5
SW4
PSTN
SW3
SW1
SW2
PWCONT
Q138
PROGRESSIVE SWITCH
OPN
DVD_CLK
DVD_CMD
DVD_STAT
MUTE
IC451
C2BBFD000307
MECHA-CONTROL
XOUT
XIN
X451
REST
DATAI
DATAO
B_CLK
B_CS
B_REQ
MECHRS
MECHSO
MECHSI
MECHCK
MECHCS
MECHRQ


TUNERL(R)
NJ-ST
NJ-CK
NJ-DT
6CHSL(R)
6CHC
6CHFL(R)
6CHSW
IC803
C0ABCB000052
QUAD OP-AMP
8(7)
10(5)
9(6)
12(3)
13(2)
14(1)
14
16
17
ST
CK
DATA
TV
VCR
AUX
JK104
2(29)
3(28)
4(27)
5(26)
6(25)
JK103
LINEOUT
9(22)
8(23)
7(24)
11(20)
12(19)
10
IC802
C0JZAS000004
ANALOG SWITCH
Q810
SWITCH
68(72)
66(70)
LIN1(R)
LIN3(R)
IC801
C2HBZC000013
DIGITAL
SIGNAL
PROCESSOR
A0T1
(A0T2)
A0T3
A0T4
IFDI
IFCK
/CS
/RST
11(14)
27
30
54
53
52
50
DSPFL(R)
DATA
CLOCK
DCSI
DRST1
XO
XI
4
3
X801
MIXL(R)
DATA
LATCH
CLOCK
IC252
C0ABCB000052
QUAD OP AMP
SL(R)
SW
CNT
6(2)
5(3)
7(1)
9
10
8
13
12
14
6CHSL(R)
6CHSW
6CHC
Q252
MUTING
SWITCH
Q253
MUTING
SWITCH
TUNERL(R)
SER1
SER2
SER4
SENSE
DSPACK
DSPRST
IC253
KIA4558FEL
DUAL
OP AMP
FL(R)
6CHFL(R)
Q251
MUTING
SWITCH
DVD_CLK
CMD
DVD_MUTE
DVD_STAT
D451
Q255,Q256
MUTING
CONTROL
SWITCH


IC108
C0JBAR000292
TRIPLE 2CH ANALOG MULTIPLEXOR
1(13) Y1(X1)
2,12 Y0,X0
3 Z1
5 Z0
15(14)
4
INH 6
C 9
B 10
A 11
IC106
C1BB00000386
DPL SURROUND DECODER
41(32)
1
2
3
4
5
8
9
10
11
AVDD 42
D104
Q410
SUPPLY SWITCH (7.5V)
+B
40(31)
39(30)
38(29)
37(28)
36(27)
35(26)
6
12
13
19 PORT1
20 PORT2
21 PORT3
22 PORT4
15 DATA
16 LATCH
17 CLOCK
MCU I/F
PORT5 23
PORT6 24
S_MUT
PROG
S_MUT
DSPFL(R)
DCIN
TUNER PACK
KEY SWITCH
(JOG VOL)
VR601
12 DSPRST
13 DSPACK
14 SENSE
33 SER4
35 SER2
36 SER1
43 SD IN
44 DO/ST
34 SER3
7,8 KEY1,KEY2
9 JOG1B
10 JOG1A
IC601
C2BBGF000463
SYSTEM CONTROL
90 MECHSI
91 MECHSO
92 MECHCK
93 MECHRQ
94 MECHCS
95 MECRST
GRD1-8
47-54
AND1-34
55-88
FL DISPLAY
FROM POWER TRANSFORMER
MECHSI
MECHSO
MECHCK
MECHRQ
MECHCS
MECHRS

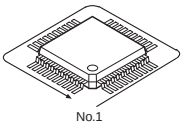

NJ_ST
NJ_CK
NJ_DT
SER4
SENSE
DSPACK
SER2
SER1
DSPRST
DRST1
DCSI
LATCH
CLOCK
DATA
4
5
6
7
8
9
10
11
12
18
31
32
34
35
36
NJ-ST
ECK/NJ-CK
EDT/NJ_DT
DCS
SENSE
DACK
DCK
DDO
DDI
RESET
RST1
CSI
CS2
CK
DO
IC805
C2BBFD000344
DSP MECHA-CONTROL
VR-ATT
MUTEA
MUTESW
EXP17
EXP18
EXP16
EXP15
XOUT
XIN
26
29
27
23
22
24
25
20
19
X802
Q132
MUTING CONTROL
Q137
DSP MUTING CONTROL SWITCH
Q409
CENTER FOCUS CONTROL SWITCH
Q136
SUBWOOFER LEVEL CONTROL SWITCH
Q133
SWITCH
Q142 (Q143)
MUTING SWITCH
Q408
SWITCH
Q135
SUBWOOFER LEVEL CONTROL SWITCH
Q130(Q131)
MUTING SWITCH
IC103
C0ABCB000052
QUAD OP AMP
5(3)
7(1)
6(2)
12
14
13
9
8
10
Q404
CENTER FOCUS CONTROL SWITCH
Q405
MUTING CONTROL SWITCH
Q401
SWITCH
Q402(Q403)
MUTING SWITCH
IC401
C0AABB000117
DUAL OP AMP
IC402
C0ABCB000052
QUAD OP AMP
3(5)
1(7)
2(6)
10
8
9
12
14
13
Q406
MUTING CONTROL SWITCH
Q407
MUTING SWITCH
IC104
KIA4558FEL
DUAL OP AMP
6
7
5
2
1
3
+B
D804
Q808, Q809
REGULATOR
Q806, Q807
REGULATOR
D803
D801,D802
Q805
DC DETECT SWITCH
Q553~Q556
FAN MOTOR SUPPLY SWITCH
M
DCDET
PHONE
SYNC
PCNT
28
15
32
27
IC601
C2BBGF000463
SYSTEM CONTROL
XOUT
XIN
RMT
RESET
D1~D5 LED, WAKE LED
23
22
31
18
1~5, 45
X602
Z601
(REMOTE SENSOR)
Q601
RESET SWITCH
Q605, Q608~Q612
LED DRIVER
D612, D614~D618


IC501
RSN311W64B-P
HIC
POWER CONTROL CIRCUIT
POWER CONTROL/PROTECTION CIRCUIT
SIL(R)
CIN
SW IN
LIN(R)
+DI SENS
+VD
+VCC HI
+VCC LOW
SOL(R)
COUT
ROUT
SW OUT
LOUT
IN GND
DISP H/MUT
AC IN
IH DET
GND
-VCC LOW
-VCC HI
-VD
DI SENS
D501
D502
+B
−B
RCH
FILTER
LCH
JK501
MAIN
SPEAKER
JK502
CENTRE
SPEAKER
JK502
SUBWOOFER
SPEAKER
JK502(JK501)
SURROUND
SPEAKER
D503
D507
Q504
SWITCH
Q505
FAN
ON/OFF
SWITCH
D506
IC502
STK470-050A
HIC
+VIN2
+10V
VO4
+3.3V
VO5
GND
GND
-VIN1
-12 VIN1
VO3
VO2
VO1
+12VIN1
+VIN1
D551
Q501,
Q502
SWITCH
Q503
SWITCH
(HP)
JK603
HEADPHONE
D504
D535
D701−D704
T501
Q594
SWITCH
Q592
SWITCH
D591,D592
T502
SUB
TRANSFORMER
D531−D534
Q551
DC DETECT
SWITCH
Q557
DC DETECT
SWITCH
Q558
POWER
CONTROL
SWITCH
Q552
DC DETECT
SWITCH
Q541
VOLTAGE
REGULATOR
D542−D546
D528,
D524−D526
D521−D523,
D527
POWER TRANSFORMER
JK500
AC INLET
L500
Z501
RLY501
F1
D505
TO FL DISPLAY
Q531
POWER
CONTROL
SWITCH
D520
E500
SIGNAL LINES
: MAIN SIGNAL LINE
: DVD AUDIO SIGNAL LINE
: CD-DA (AUDIO/VIDEO) SIGNAL LINE
: DVD AUDIO/VIDEO SIGNAL LINE
: DVD VIDEO SIGNAL LINE
: FM & AM SIGNALS LINE
( ) Indicates the Pin No. of Right channel.
NOTE : Signal Lines are applicable to the Left Channel only.



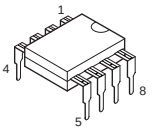
C0JBA000292 (16p)
KIA4558FEL (8p)
C0ABCB00052 (14p)
C2BBFD000307 (42p)
C2BBFD000344 (42p)
C9ZB00000377 (32p)

C1BB00000386 (42p)
C3ABPG000063 (54p)
C0JZAS000004 (30p)
C0JBAZ001251 (20p)
C1DB00000980 (16p)
RFKFMD70M160 (48p)

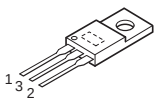


C2HBZC000013 (80p)
C0FBBK000036 (48p)
C2BBGF000463 (100p)
MN2DS0002AP1 (256p)

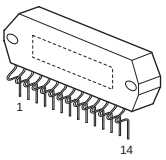
C0AABB000117



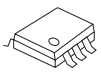
C0CAADG00019



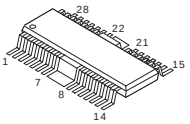
STK470-050A



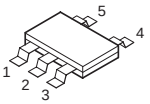
C0CBCBE00003



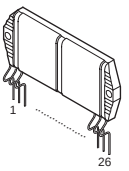
C0GBG0000033



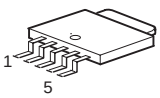
C0JBAA000001
C0EBE0000070



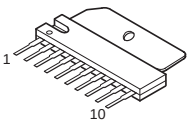
RSN311W64B-P



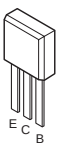
C0DBAJG00002



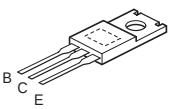
C0GAM0000005



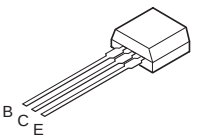
B1AAJC000007



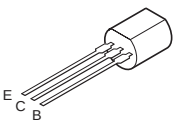
KTA1046

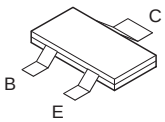


B1GACFLL0005



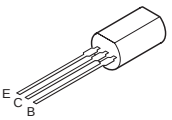
2SB0621ARA
2SB621ARSTA



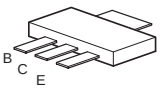


B1GDCFJJ0002
B1GBCFJN0004
B1ABCF000011
B1ADCF000001
2SD1819A0L
UNR221200L
B1GDCFEM0002
UNR511M00L

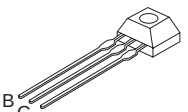
2SC3940ARA



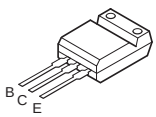
B1BDBF000004



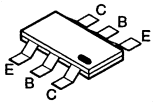
KRA102MTA
KRA111MTA
KRC102MTA
KRC111MTA
KTC3199GRTA
B1GACFGG0004
B1AAGC000007
B1ACCF000037



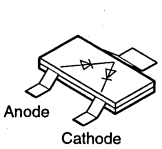
2SB14170QA



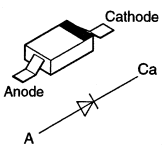
B1GFGCAA0001



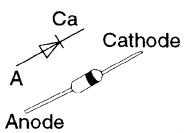
B0ADCC000002



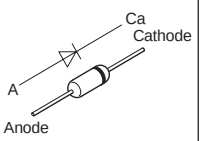
1SS380TE-17



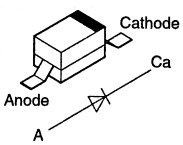
MA2J72800L



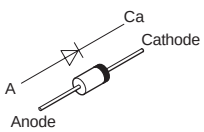
B0AACK000004
B0EAMM000038



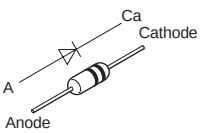
SFPB-72V



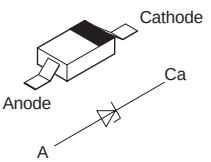
RL1N4003N02
B0EAKM000085



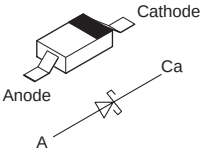
MA2C700A0F



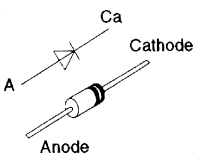
B0BC9R000008
B0BC7R500001
B0BC5R000009
B0ACCK000005

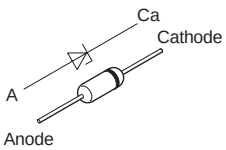


MA2J72900L



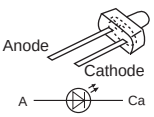
RK306LFU1



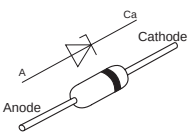


B0BA4R600003
B0BC5R600003
B0BA5R000004
B0BA6R800007
B0BA8R700009

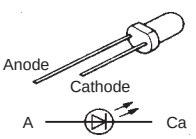
SLR325VCT31
B3ADA0000087



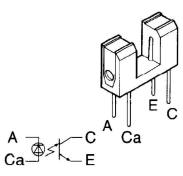
B0BA02600018



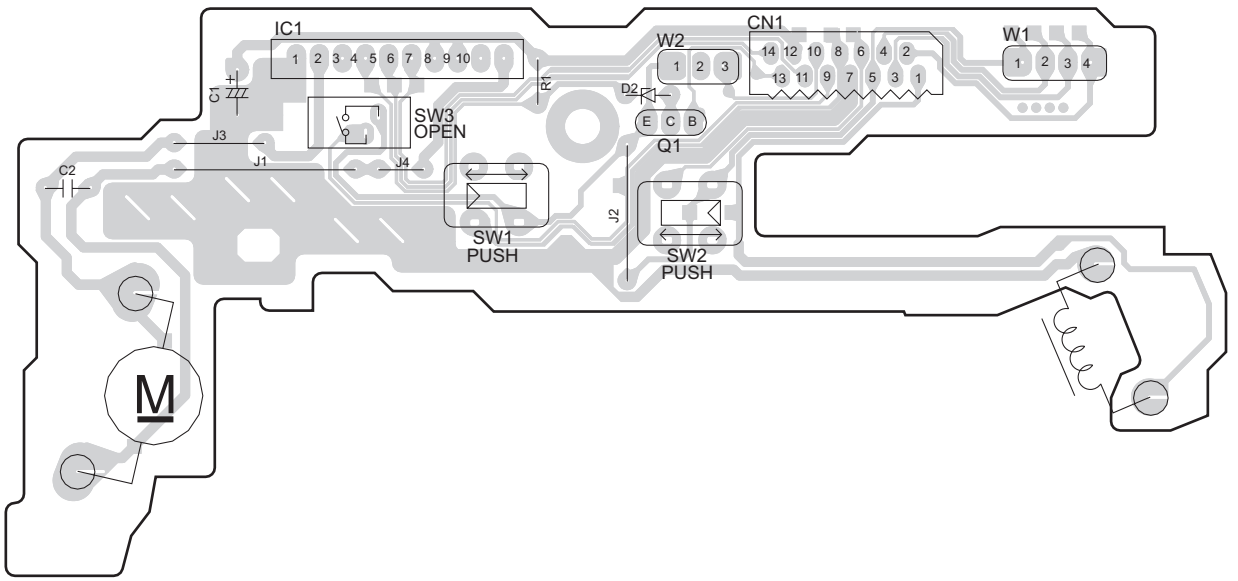
B3ACA0000220



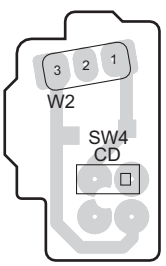
GP1S94



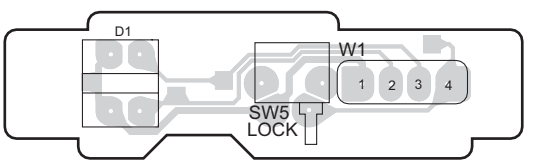
G CD LOADING P.C.B (REP3457A)



I CD DETECT P.C.B (REP3457A)

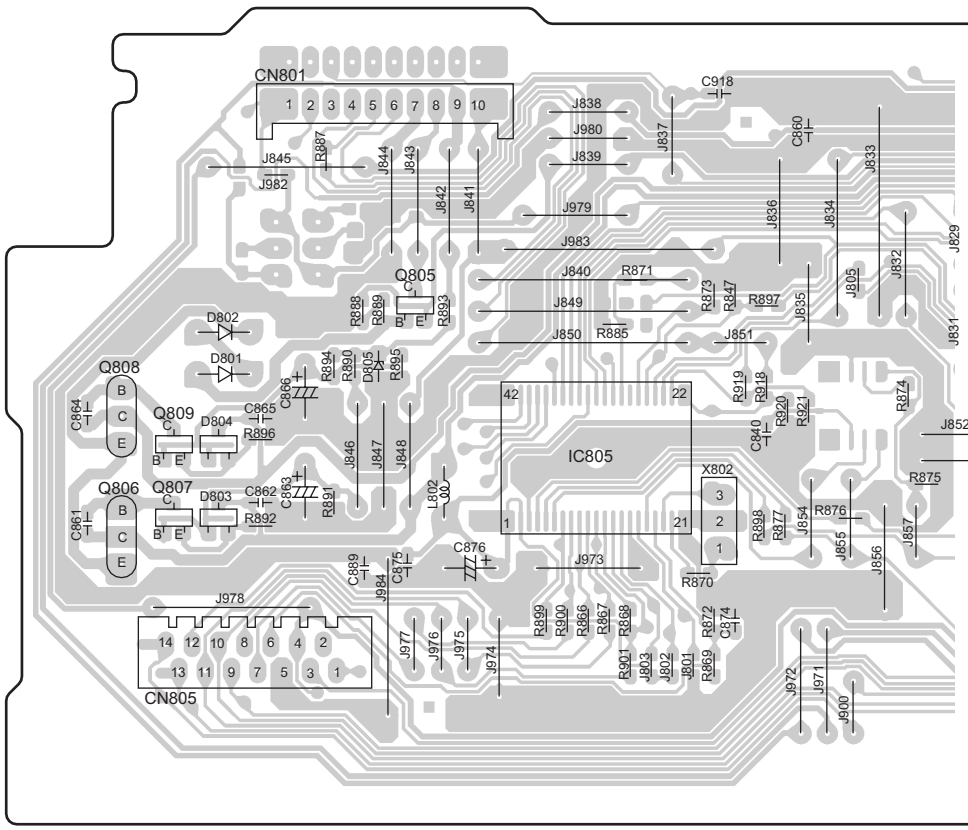


H SPINDLE POSITION P.C.B (REP3457A)



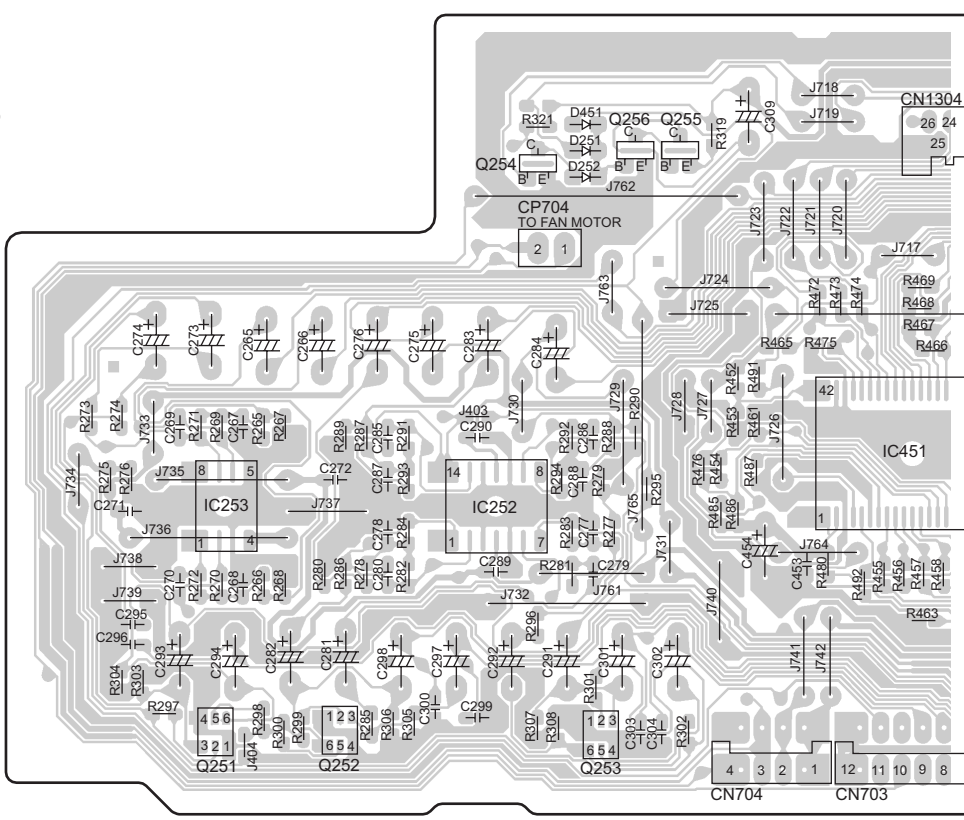
E

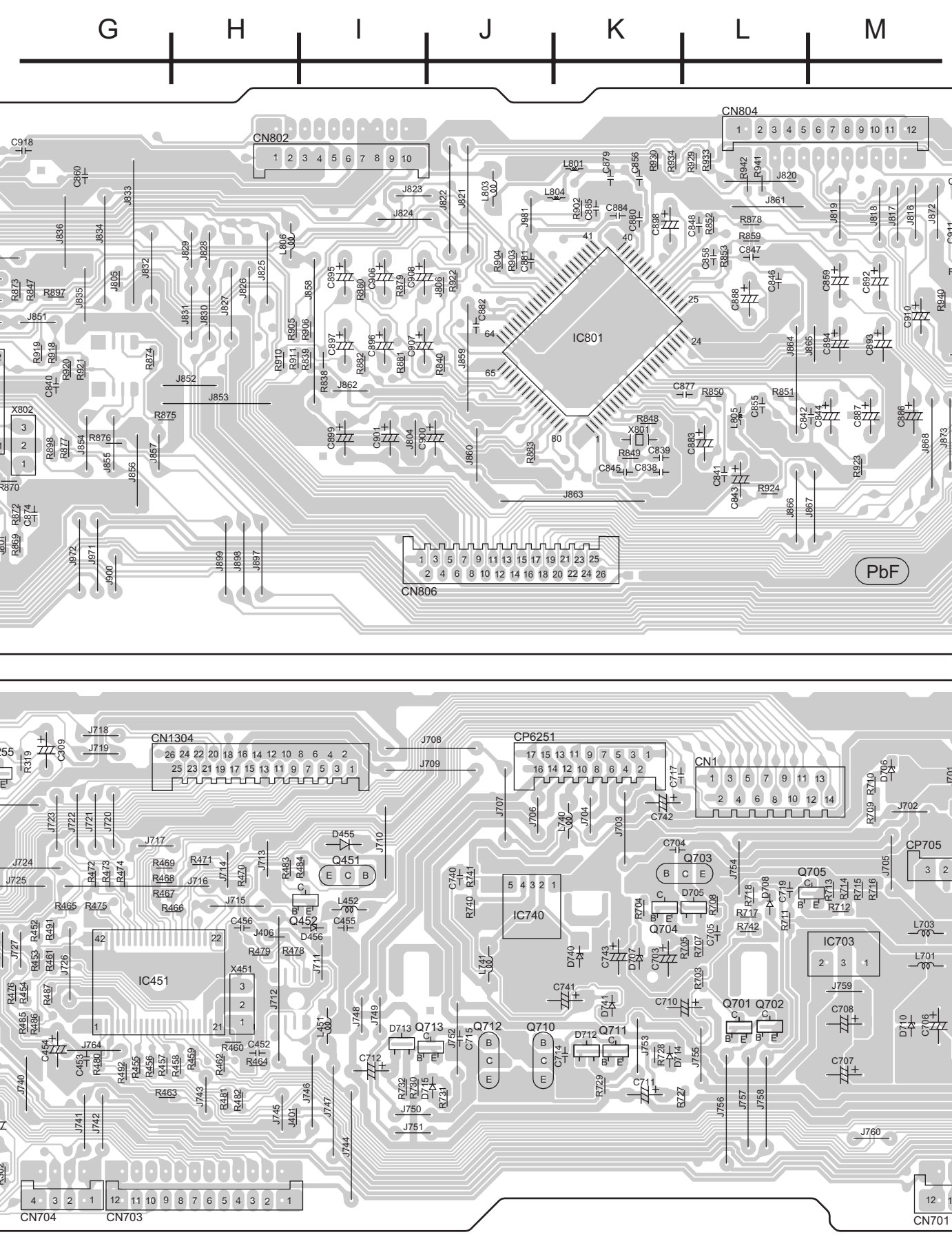
DSP P.C.B
(REPX0391A)

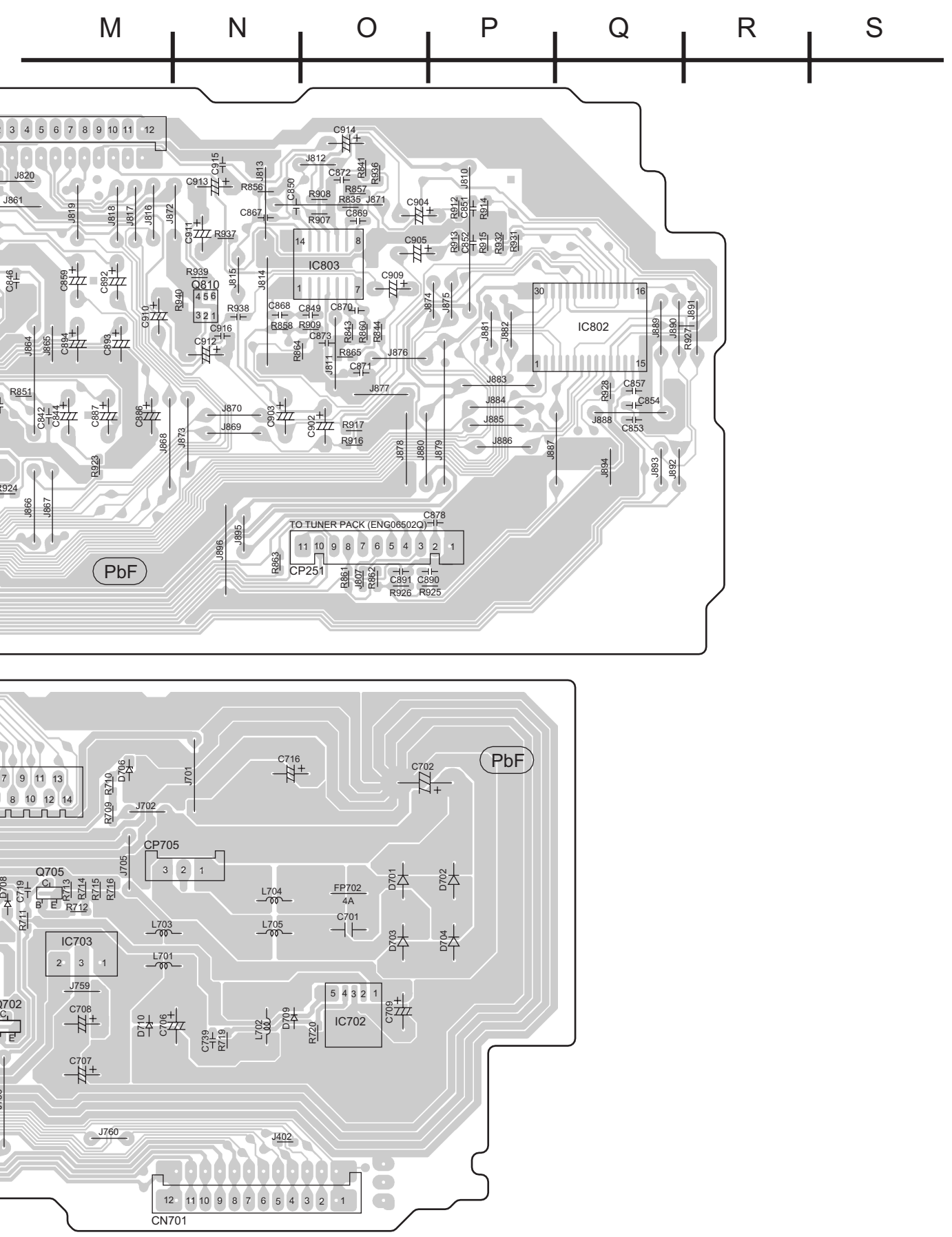


F

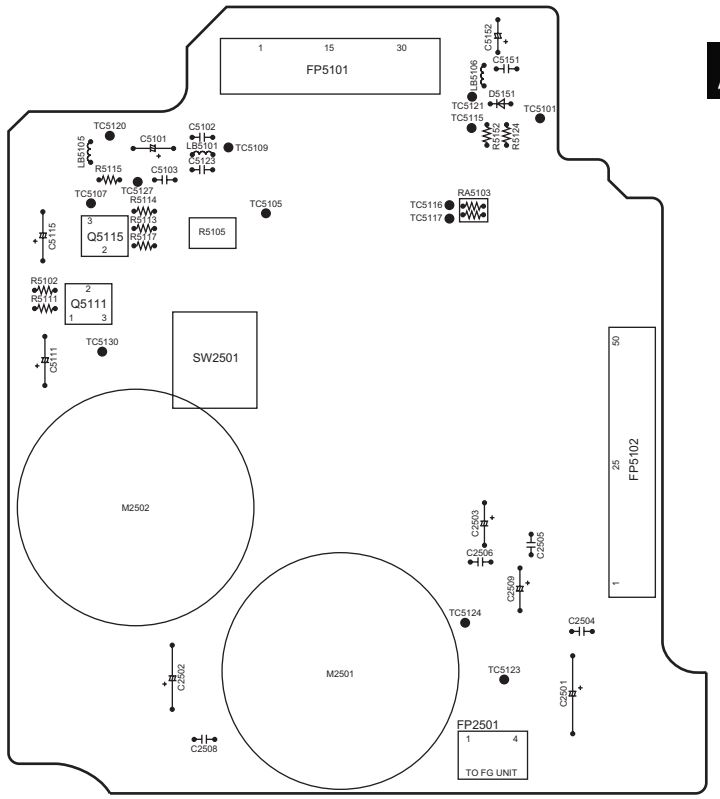
DVDREG P.C.B
(REPX0391A)




G
H
I
J
K
L
M
CN804
CN802
IC801
CN806
X802
PbF
CN1304
CP6251
CN1
CP705
IC451
IC740
IC703
X451
Q451
Q452
Q703
Q704
Q705
Q701
Q702
Q710
Q711
Q712
Q713
CN704
CN703
CN701

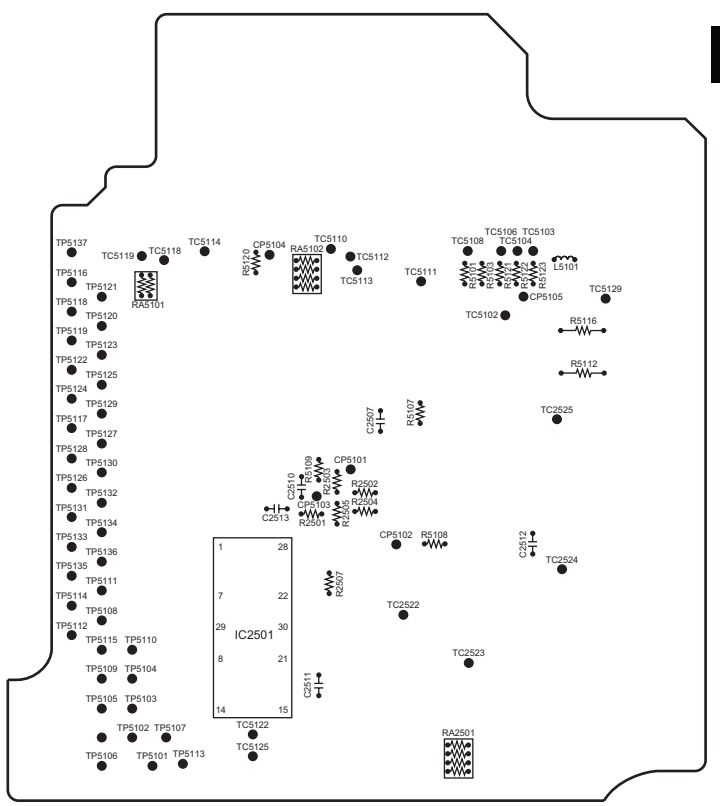

M
N
O
P
Q
R
S
IC803
IC802
Q810
TO TUNER PACK (ENG06502Q)
CP251
PbF
CP705
Q705
IC703
IC702
FP702
4A
CN701

A DVD MODULE (1)
P.C.B (REP3406B-N)



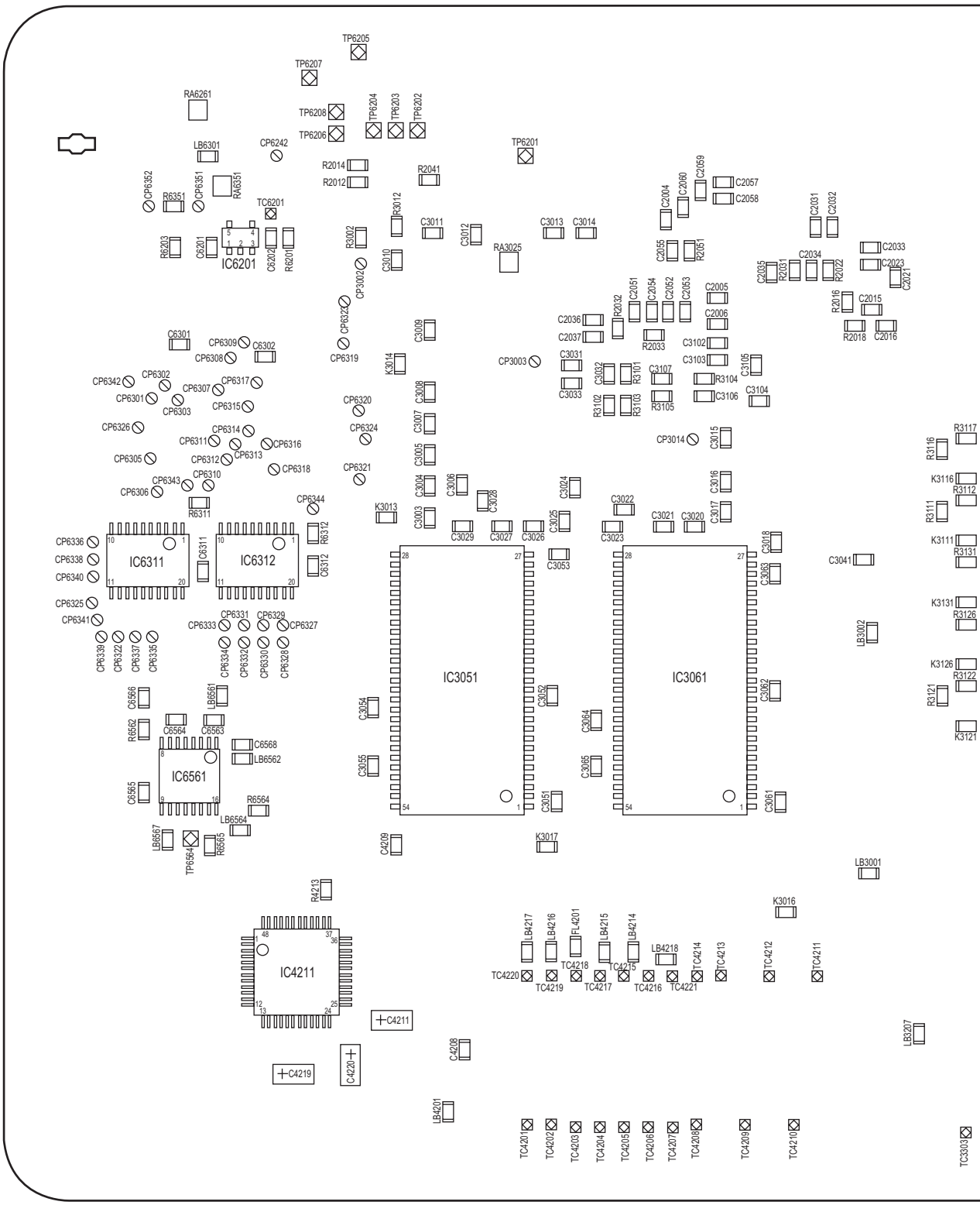
(COMPONENT SIDE)

A DVD MODULE (1)
P.C.B (REP3406B-N)



(FOIL SIDE)

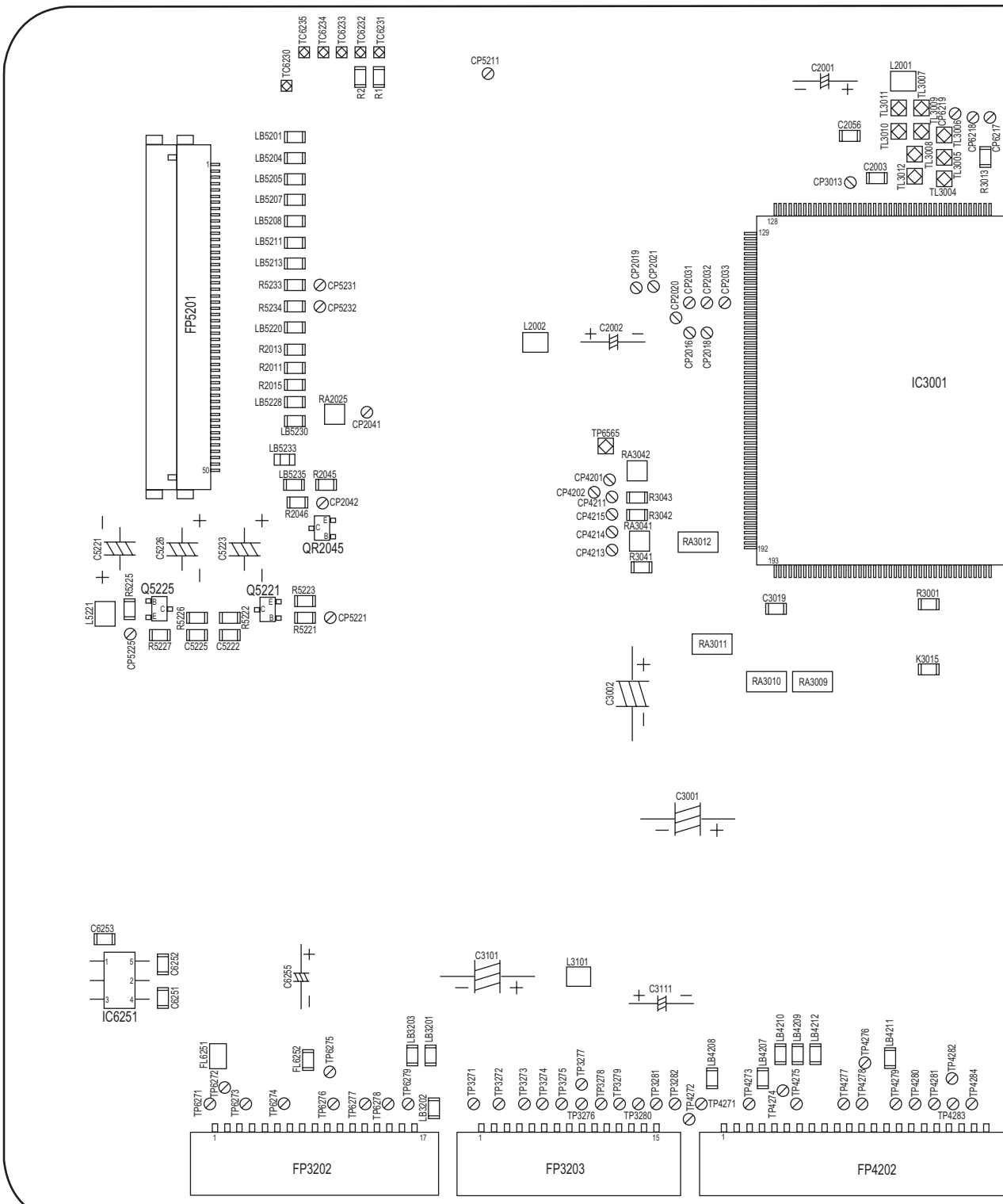
B DVD MODULE (2) P.C.B (REPX0393A)



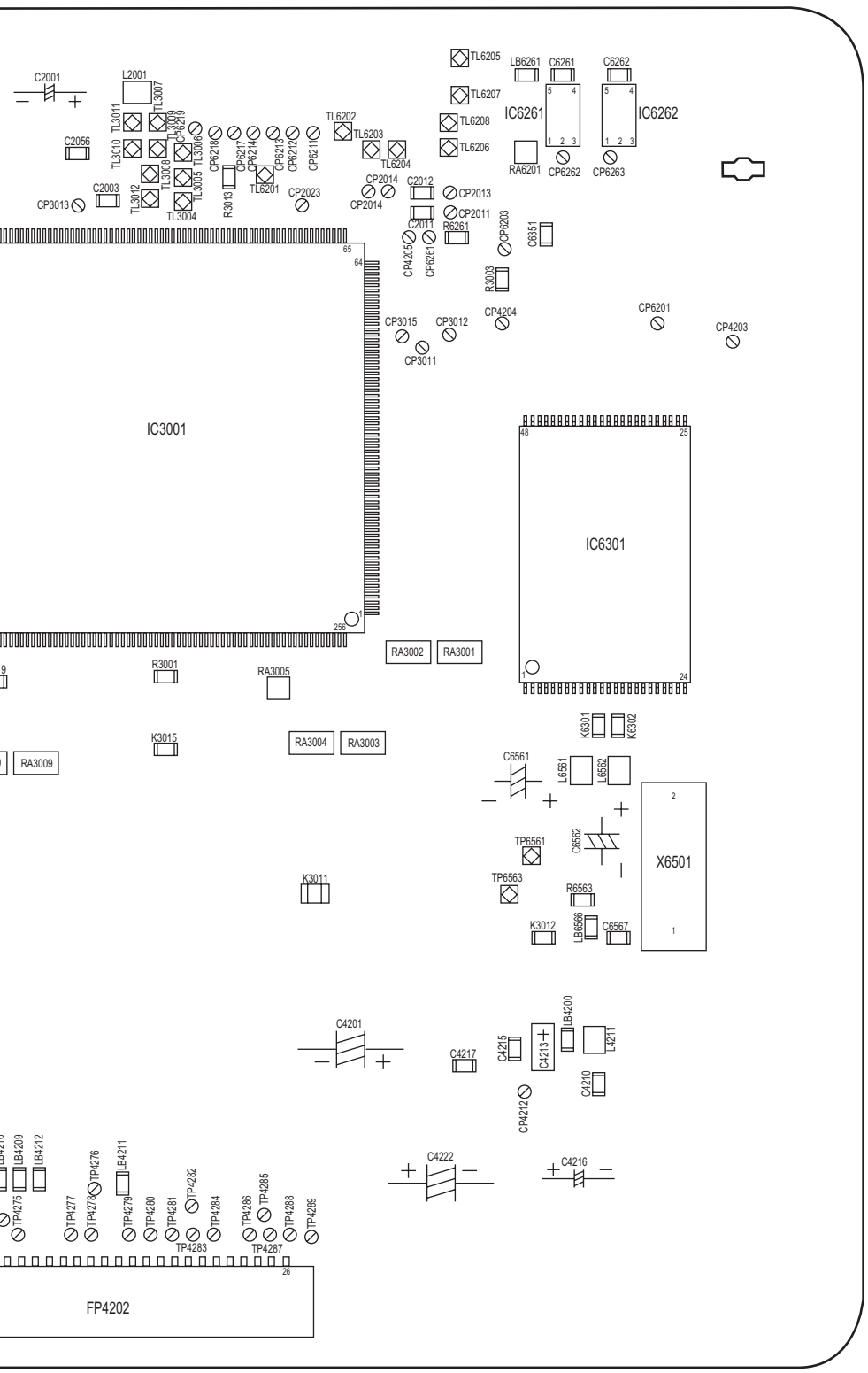
(SIDE A)

G
H
I
J
K
L
M
Q5211
E
B
C
R5235
TC6236
TC6237
TC6238
TC6239
TC6240
TC6241
TC5201
C5201
TC5202
C5231
R5231
TC5242
TC5203
R5201
C5202
R5232
TC5243
C5232
TC5204
TC5209
TC5206
LB5206
TC5205
TC5207
LB5210
TC5244
TC5208
TC5211
LB5209
LB5212
TC5213
TC5210
TC5214
TC5212
C5203
LB5215
TC5216
LB5217
TC5219
TC5220
TC5217
TC5215
LB5219
TC5221
TC5218
R5202
R2023
TC5224
TC5222
LB5222
TC5229
TC5226
TC5223
K2041
TC5225
TC5227
R2017
TC5228
TC5230
TC5231
R2021
TC5233
LB5229
TC5232
TC5234
LB5214
TC5235
TC5236
TC5237
TC5239
LB5231
TC5240
TC5238
TC5241
LB5234
C2031
C2032
C2033
C2034
C2023
R2031
R2022
C2021
R2016
C2015
R2018
C2016
R3117
R3116
K3116
R3112
R3111
K3111
R3131
C3041
K3131
R3126
LB3002
K3126
R3122
R3121
K3121
C3061
LB3001
K3016
TC4212
TC4211
LB3206
LB3208
LB3205
LB3204
FL6254
FL6253
K6253
TC3209
TC3208
TC32207
TC3206
TP6252
TP6251
TP6259
TP6254
LB3207
TC4210
TC3303
TC3201
TC3304
TC3305
TC3202
TC3203
TC3204
TC3205
TP6257
TP6258
TP6255
TP6256
TP6253

B DVD MODULE (2) P.C.B (REPX0393A)



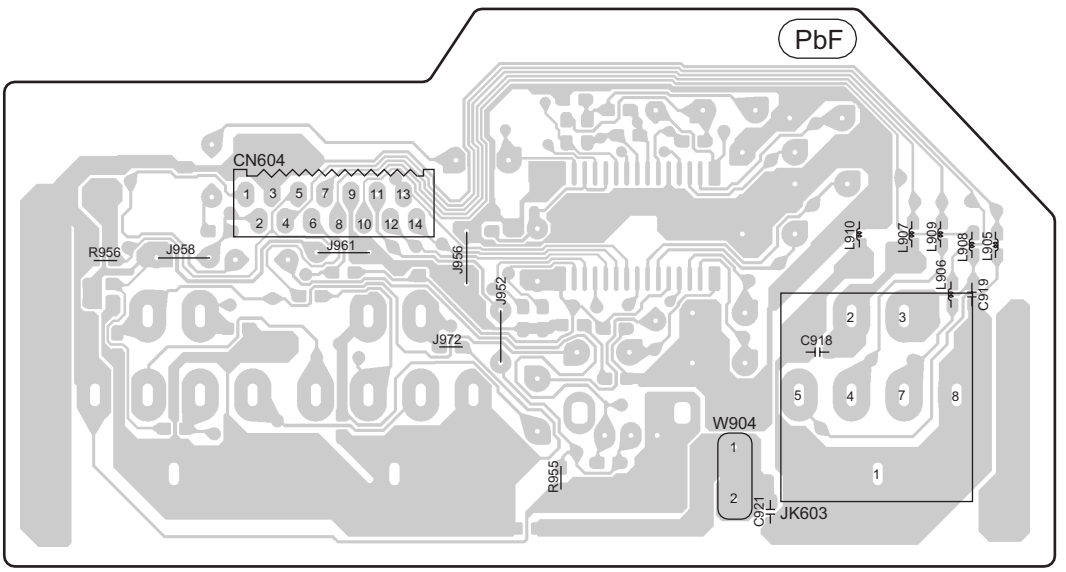
(SIDE B)


C2001
L2001
TL3007
TL3011
TL3010
C2056
TL3008
TL3012
C2003
CP3013
TL3004
TL3005
TL3006
CP6218
CP6219
TL3009
R3013
CP6217
CP6214
TL6201
CP6213
CP6212
CP6211
TL6202
TL6203
TL6204
CP2023
CP2014
CP2014
C2012
CP2013
CP2011
C2011
R6261
CP4205
CP6261
CP6203
R3003
C6351
TL6205
TL6207
TL6208
TL6206
LB6261
C6261
C6262
IC6261
IC6262
RA6201
CP6262
CP6263
CP3015
CP3012
CP3011
CP4204
CP6201
CP4203
IC3001
IC6301
RA3002
RA3001
R3001
RA3005
K3015
RA3004
RA3003
RA3009
K6301
K6302
C6561
L6561
L6562
TP6561
C6562
X6501
K3011
TP6563
R6563
K3012
LB6566
C6567
C4201
C4217
C4215
C4213
LB4200
L4211
C4210
CP4212
C4222
C4216
LB4210
LB4209
LB4212
TP4275
TP4276
TP4277
TP4278
TP4279
LB4211
TP4280
TP4281
TP4282
TP4284
TP4283
TP4286
TP4285
TP4288
TP4289
TP4287
FP4202

A B C D E F G

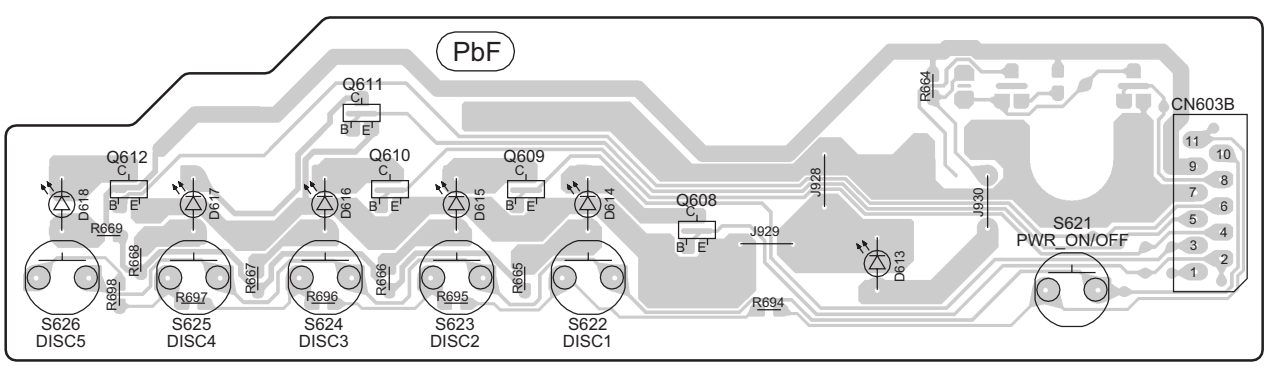
1 2 3 4 5 6 7 8 9

L HEADPHONE P.C.B (REPX0392A)

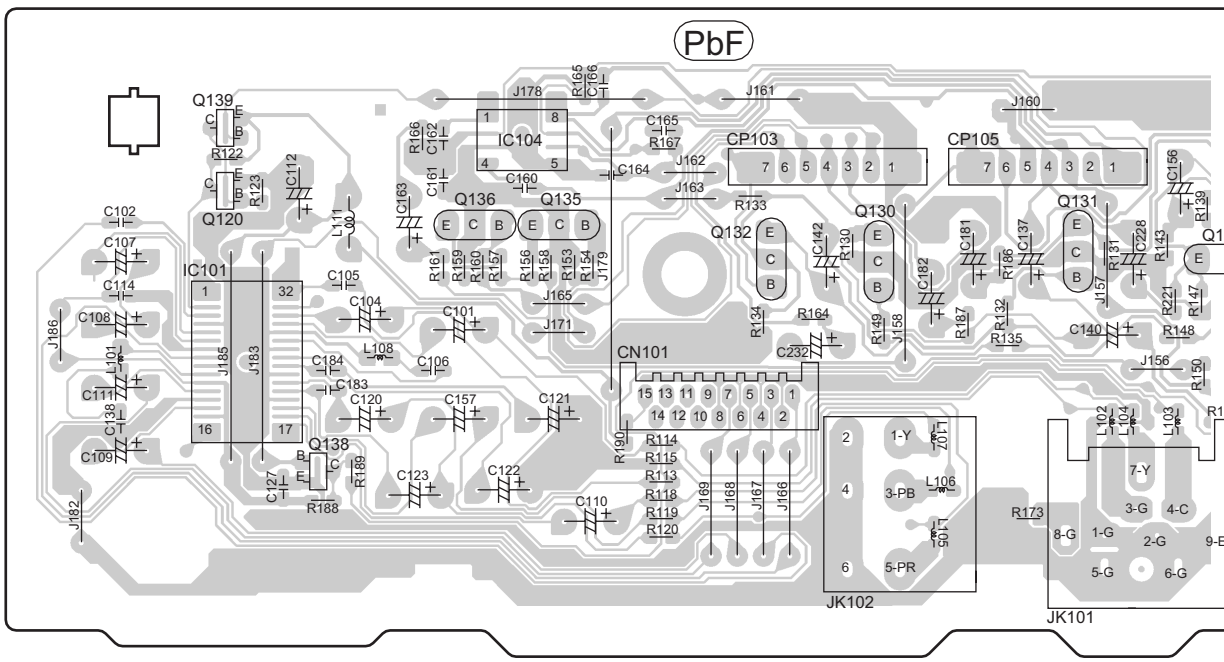


HEADPHONE

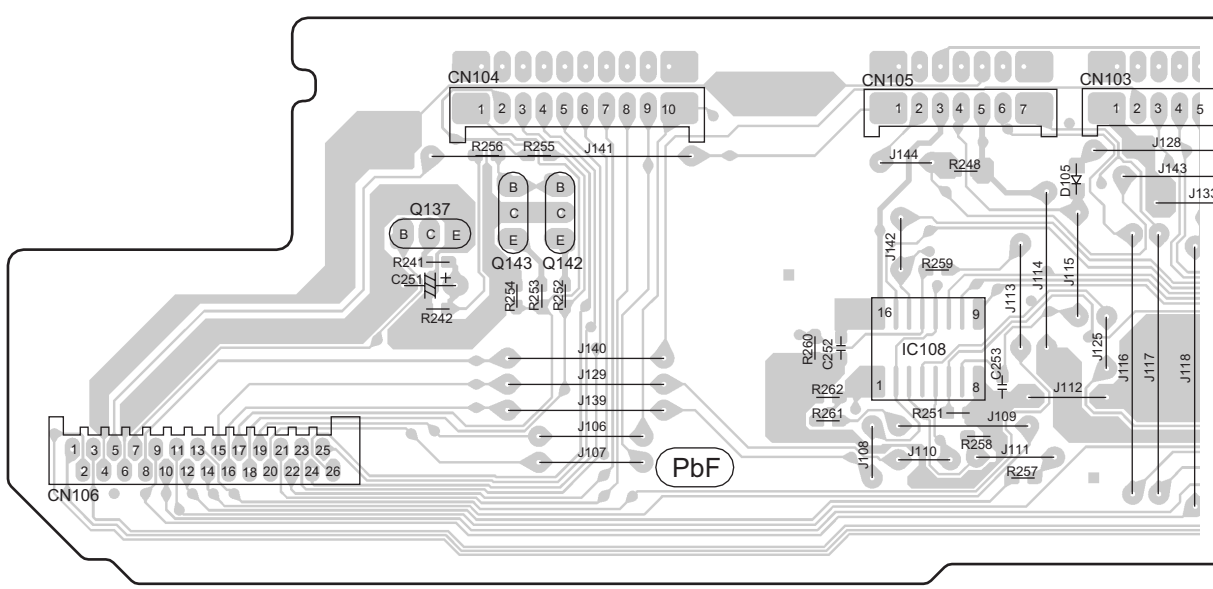
K SWITCH P.C.B (REPX0392A)



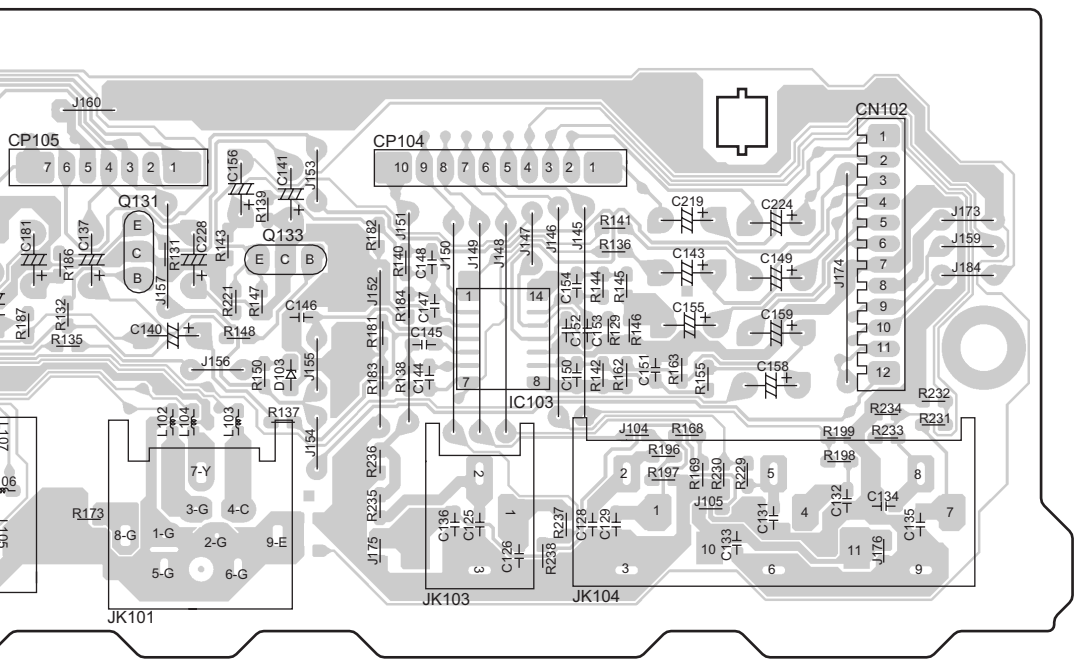
C INPUT P.C.B (REPX0391A)



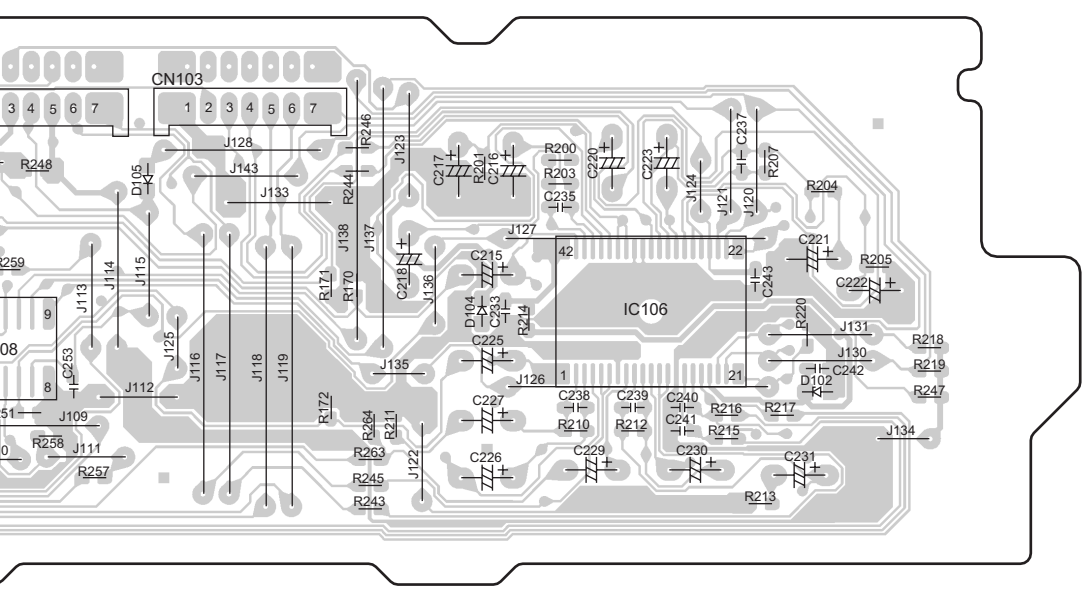
D ASP P.C.B (REPX0391A)



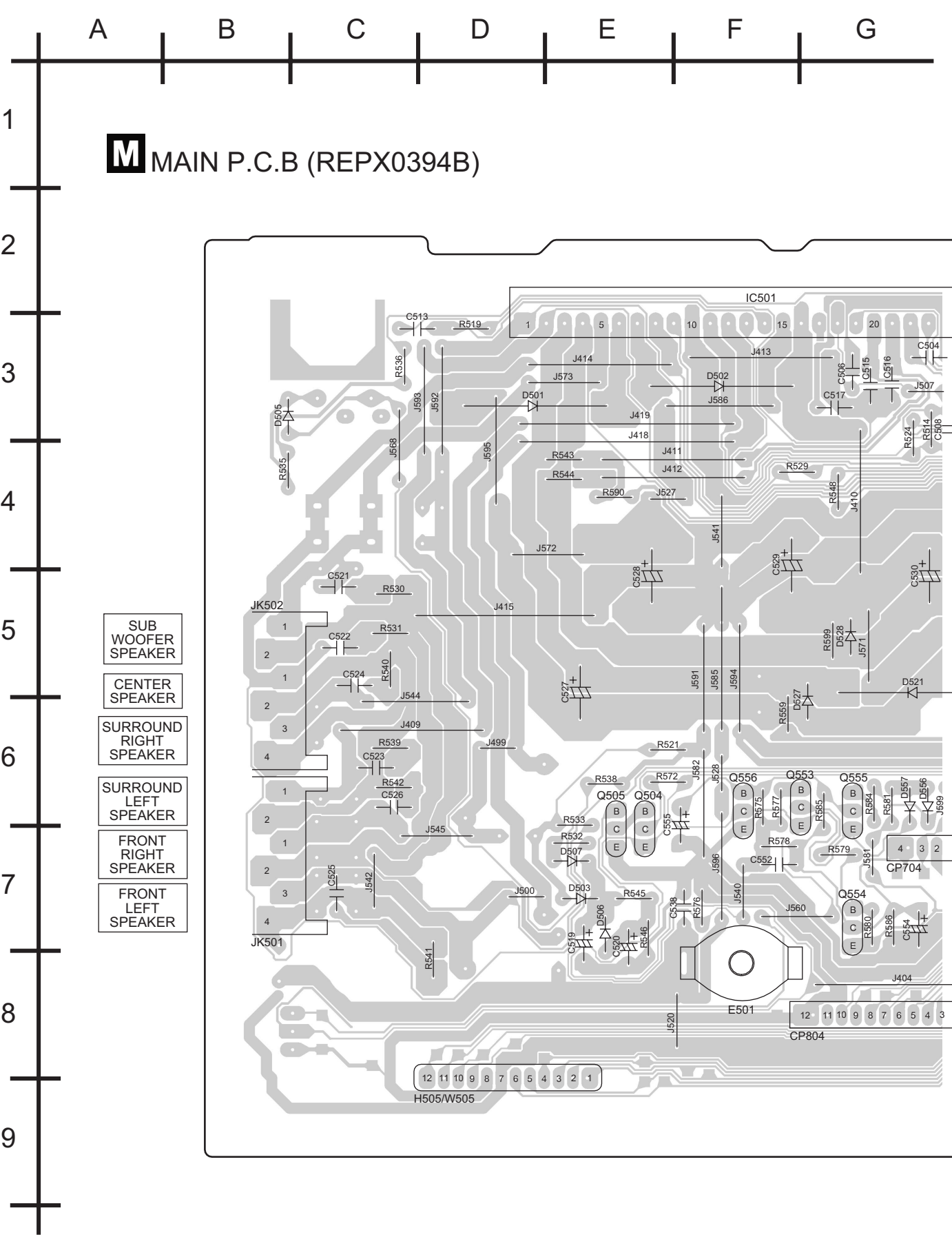
G H I J K L M

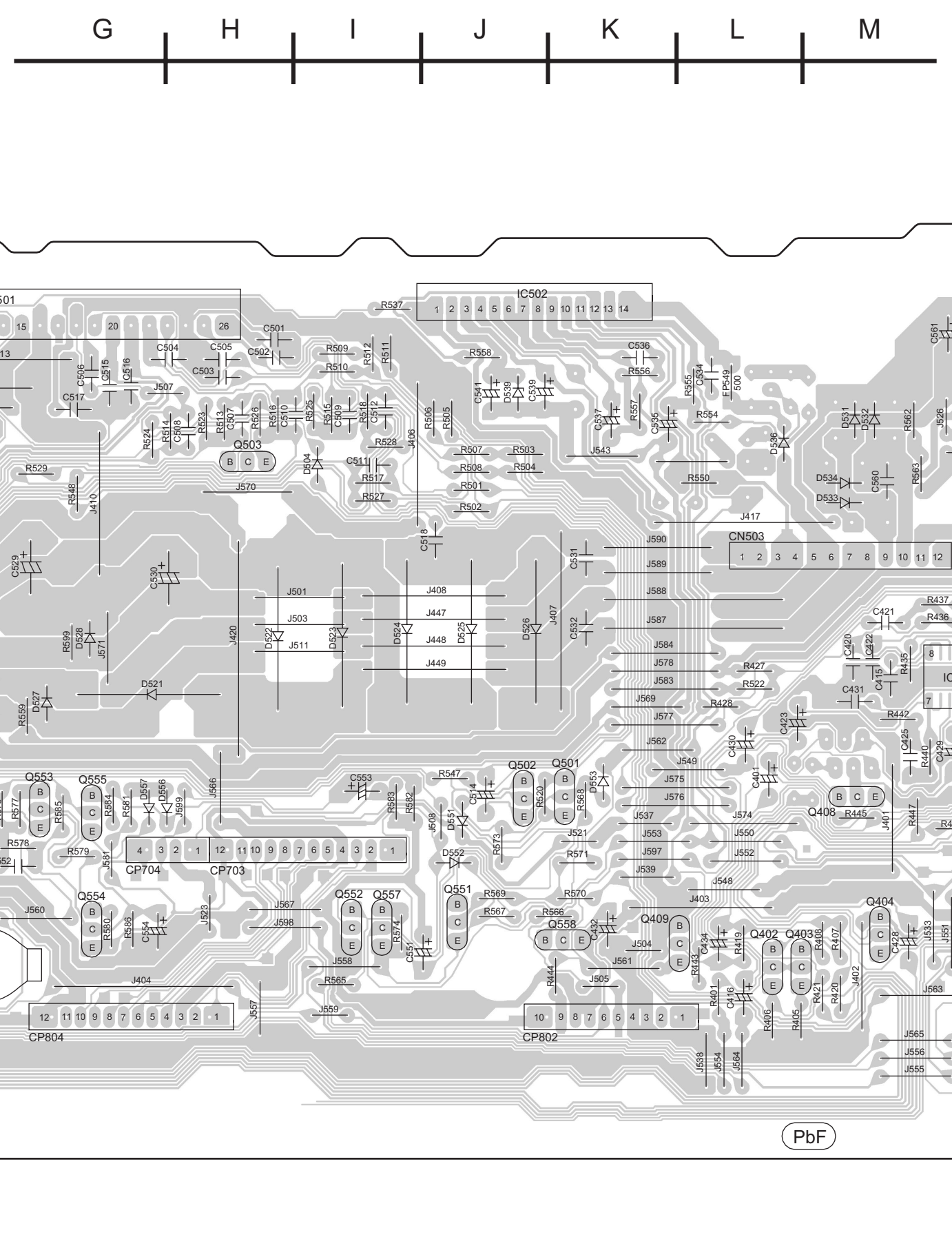


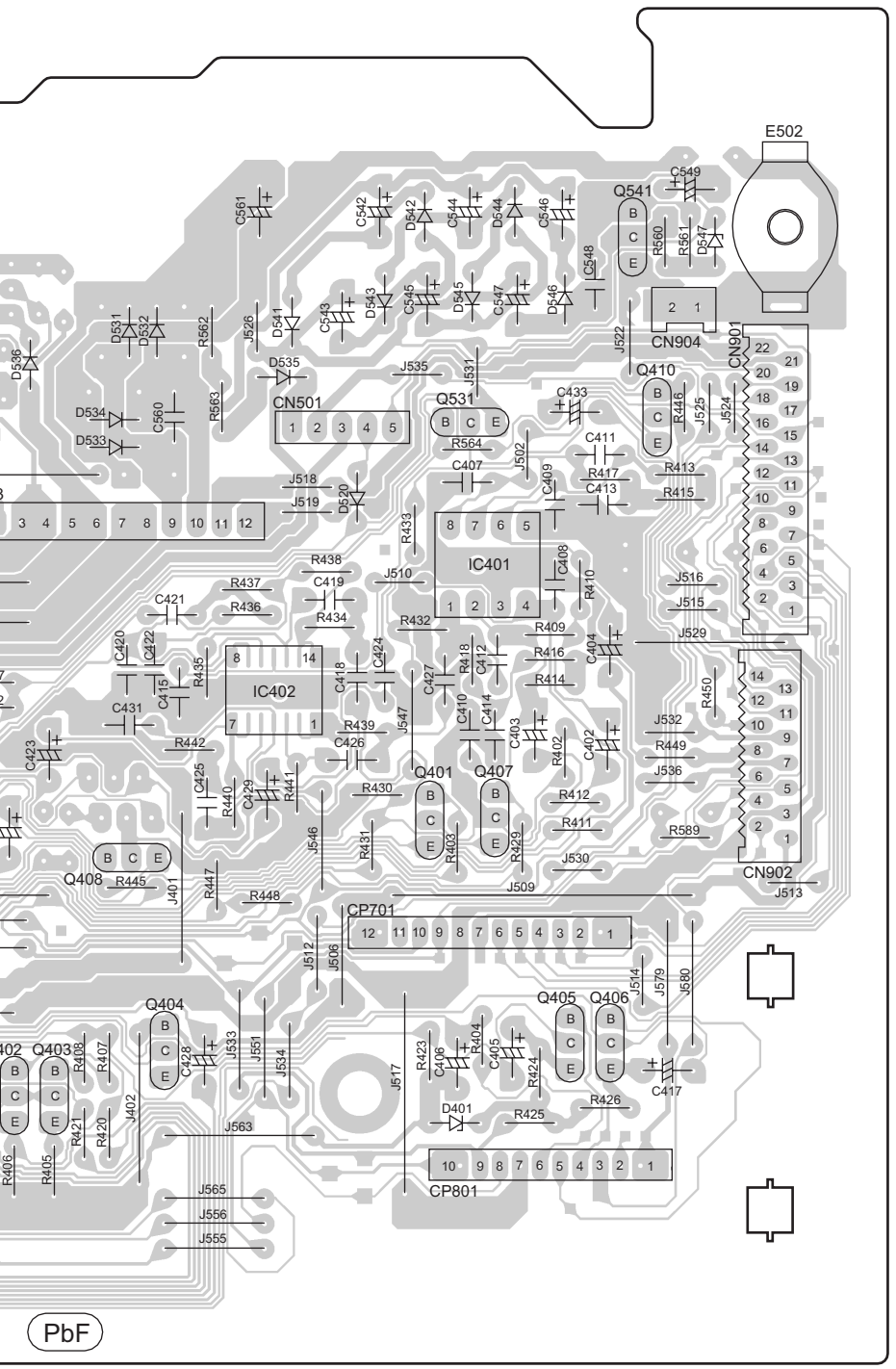
NT | VIDEO OUT | S-VIDEO OUT | LINE OUT | AUX | VCR AUDIO IN | TV AUDIO IN



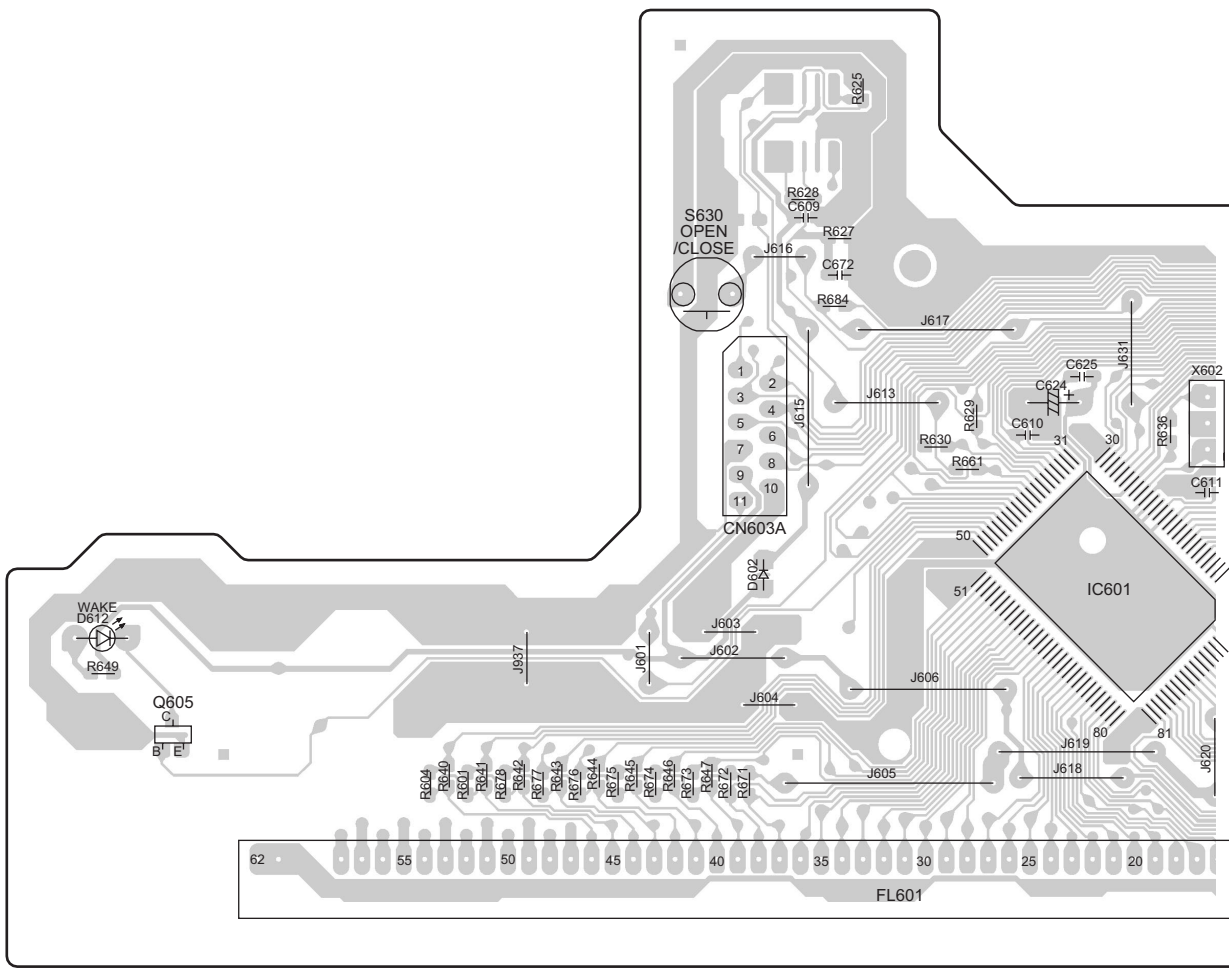
M MAIN P.C.B (REPX0394B)

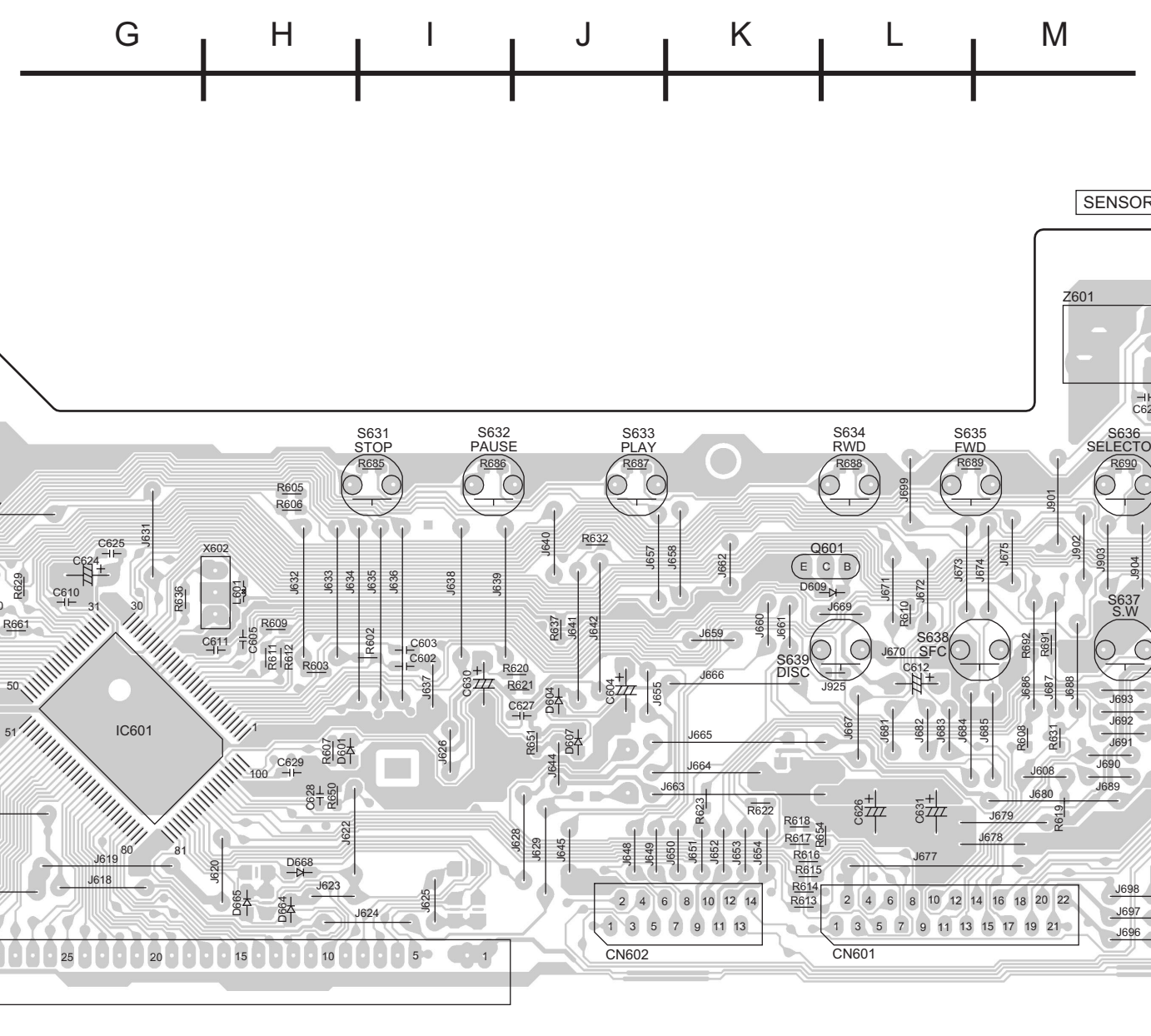



G
H
I
J
K
L
M
IC502
CN503
CP704
CP703
CP804
CP802
Q503
Q553
Q555
Q554
Q552
Q557
Q551
Q558
Q502
Q501
Q409
Q402
Q403
Q404
Q408
PbF

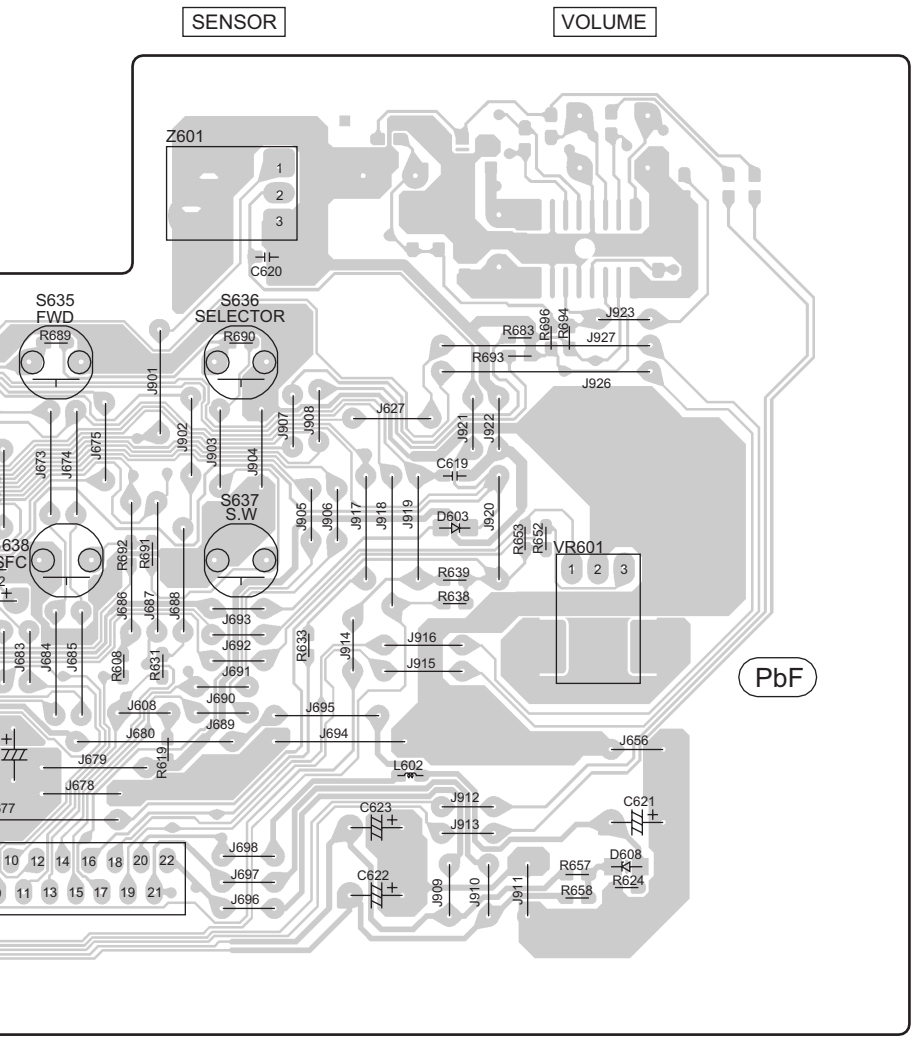

M
N
O
P
Q
R
S
E502
Q541
C549
C561
C542
D542
C544
D544
C546
R560
R561
D547
C548
D531
D532
R562
J526
D541
C543
D543
C545
D545
C547
D546
J522
CN904
CN901
D536
D535
J535
J531
Q410
C433
D534
C560
R563
CN501
Q531
R446
J525
J524
D533
R564
C411
J502
C407
C409
R417
R413
J518
J519
D520
C413
R415
R433
IC401
C408
R410
R438
J510
J516
C421
R437
C419
R436
J515
R434
R432
R409
J529
C420
C422
C424
C418
C427
R418
C412
R416
C404
R414
R450
C415
R435
IC402
C431
C410
C414
C403
J532
J547
R439
R449
C423
R442
C426
R402
C402
J536
C425
R440
C429
R441
Q401
Q407
R430
R412
R411
R589
J546
R431
R403
R429
J530
Q408
R445
J401
R447
R448
J509
CN902
J513
CP701
J512
J506
J514
J579
J580
Q404
Q405
Q406
Q402
Q403
R408
R407
C428
J533
J551
J534
J517
R423
C406
R404
C405
R424
C417
R426
J402
R421
R420
D401
R425
J563
R406
R405
CP801
J565
J556
J555
PbF

J PANEL P.C.B (REPX0392A)




G
H
I
J
K
L
M
SENSOR
Z601
S631
STOP
S632
PAUSE
S633
PLAY
S634
RWD
S635
FWD
S636
SELECTO
S637
S.W
S638
SFC
S639
DISC
Q601
E C B
IC601
CN602
CN601
X602
R685
R686
R687
R688
R689
R690
R605
R606
R632
R669
R670
R610
R612
R603
R602
R620
R621
R627
R651
R644
R664
R663
R623
R622
R618
R617
R616
R615
R614
R613
R654
R608
R631
R619
C625
C624
C610
C611
C605
C603
C602
C630
C604
C612
C629
C628
C626
C631
D609
D601
D607
D604
D668
D665
D664
J631
J632
J633
J634
J635
J636
J638
J639
J640
J657
J658
J662
J659
J660
J661
J666
J655
J665
J667
J681
J682
J683
J684
J685
J686
J687
J688
J693
J692
J691
J690
J689
J680
J679
J678
J677
J699
J901
J902
J903
J904
J698
J697
J696
J619
J618
J620
J622
J623
J624
J625
J626
J628
J629
J645
J648
J649
J650
J651
J652
J653
J654
J671
J672
J673
J674
J675
J925
J644
J627
J630
J637
J641
J642
J643
J646
J647
J670
J683
J684
J685
J686
J687
J688
J693
J692
J691
J690
J689
J680
J679
J678
J677
J698
J697
J696
R629
R636
L601
R661
R609
R611
R602
C603
C602
R620
R621
R637
R641
R642
R643
R646
R647
R652
R653
R655
R656
R657
R658
R659
R660
R661
R662
R663
R664
R665
R666
R667
R668
R669
R670
R671
R672
R673
R674
R675
R676
R677
R678
R679
R680
R681
R682
R683
R684
R685
R686
R687
R688
R689
R690
R691
R692
R693
R694
R695
R696
R697
R698
R699
R901
R902
R903
R904
C606
C607
C608
C609
C610
C611
C612
C613
C614
C615
C616
C617
C618
C619
C620
C621
C622
C623
C624
C625
C626
C627
C628
C629
C630
C631
C632
C633
C634
C635
C636
C637
C638
C639
C640
C641
C642
C643
C644
C645
C646
C647
C648
C649
C650
C651
C652
C653
C654
C655
C656
C657
C658
C659
C660
C661
C662
C663
C664
C665
C666
C667
C668
C669
C670
C671
C672
C673
C674
C675
C676
C677
C678
C679
C680
C681
C682
C683
C684
C685
C686
C687
C688
C689
C690
C691
C692
C693
C694
C695
C696
C697
C698
C699
C901
C902
C903
C904
D601
D602
D603
D604
D605
D606
D607
D608
D609
D610
D611
D612
D613
D614
D615
D616
D617
D618
D619
D620
D621
D622
D623
D624
D625
D626
D627
D628
D629
D630
D631
D632
D633
D634
D635
D636
D637
D638
D639
D640
D641
D642
D643
D644
D645
D646
D647
D648
D649
D650
D651
D652
D653
D654
D655
D656
D657
D658
D659
D660
D661
D662
D663
D664
D665
D666
D667
D668
D669
D670
D671
D672
D673
D674
D675
D676
D677
D678
D679
D680
D681
D682
D683
D684
D685
D686
D687
D688
D689
D690
D691
D692
D693
D694
D695
D696
D697
D698
D699
D901
D902
D903
D904
J601
J602
J603
J604
J605
J606
J607
J608
J609
J610
J611
J612
J613
J614
J615
J616
J617
J618
J619
J620
J621
J622
J623
J624
J625
J626
J627
J628
J629
J630
J631
J632
J633
J634
J635
J636
J637
J638
J639
J640
J641
J642
J643
J644
J645
J646
J647
J648
J649
J650
J651
J652
J653
J654
J655
J656
J657
J658
J659
J660
J661
J662
J663
J664
J665
J666
J667
J668
J669
J670
J671
J672
J673
J674
J675
J676
J677
J678
J679
J680
J681
J682
J683
J684
J685
J686
J687
J688
J689
J690
J691
J692
J693
J694
J695
J696
J697
J698
J699
J901
J902
J903
J904
R601
R602
R603
R604
R605
R606
R607
R608
R609
R610
R611
R612
R613
R614
R615
R616
R617
R618
R619
R620
R621
R622
R623
R624
R625
R626
R627
R628
R629
R630
R631
R632
R633
R634
R635
R636
R637
R638
R639
R640
R641
R642
R643
R644
R645
R646
R647
R648
R649
R650
R651
R652
R653
R654

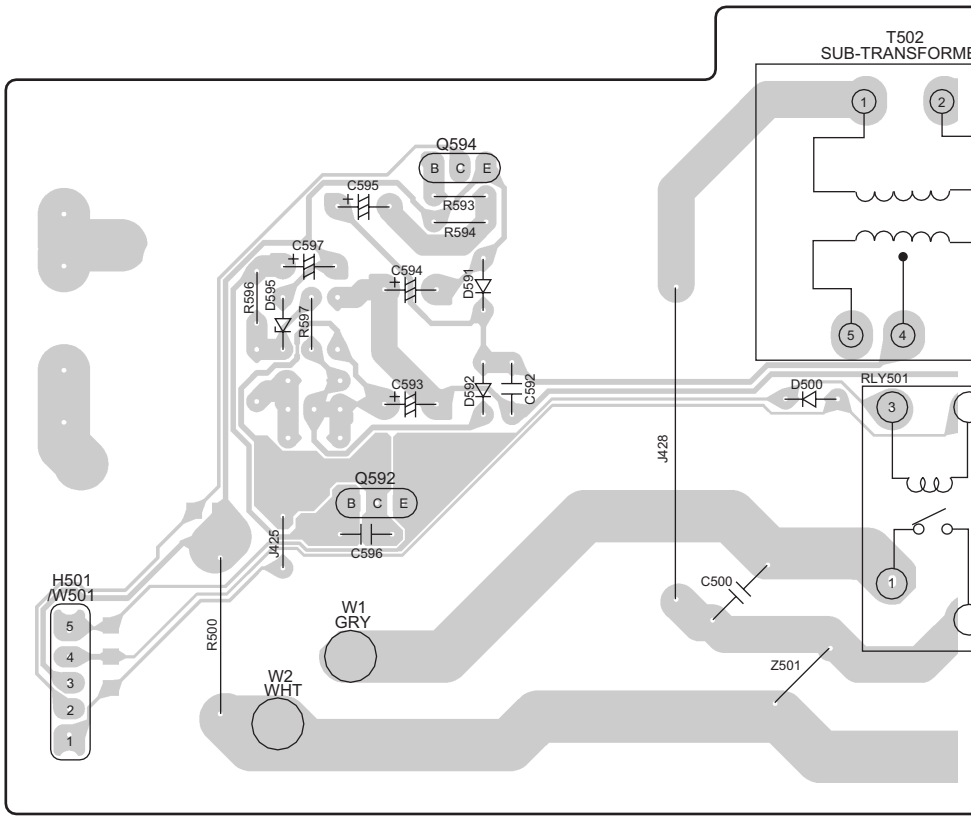
M N O P Q R S


SENSOR
VOLUME
Z601
1
2
3
C620
S635
FWD
R689
S636
SELECTOR
R690
S637
S.W
VR601
1 2 3
R683
R696
R694
J923
J927
R693
J926
J627
J921
J922
C619
D603
R653
R652
R639
R638
J916
J915
J914
R633
J693
J692
J691
J690
J689
J695
J694
J656
J680
J679
J678
L602
J912
J913
C623
C622
C621
D608
R624
R657
R658
J909
J910
J911
J698
J697
J696
J901
J902
J903
J904
J907
J908
J905
J906
J917
J918
J919
J920
J673
J674
J675
J686
J687
J688
J683
J684
J685
R692
R691
R608
R631
R619
J608
PbF

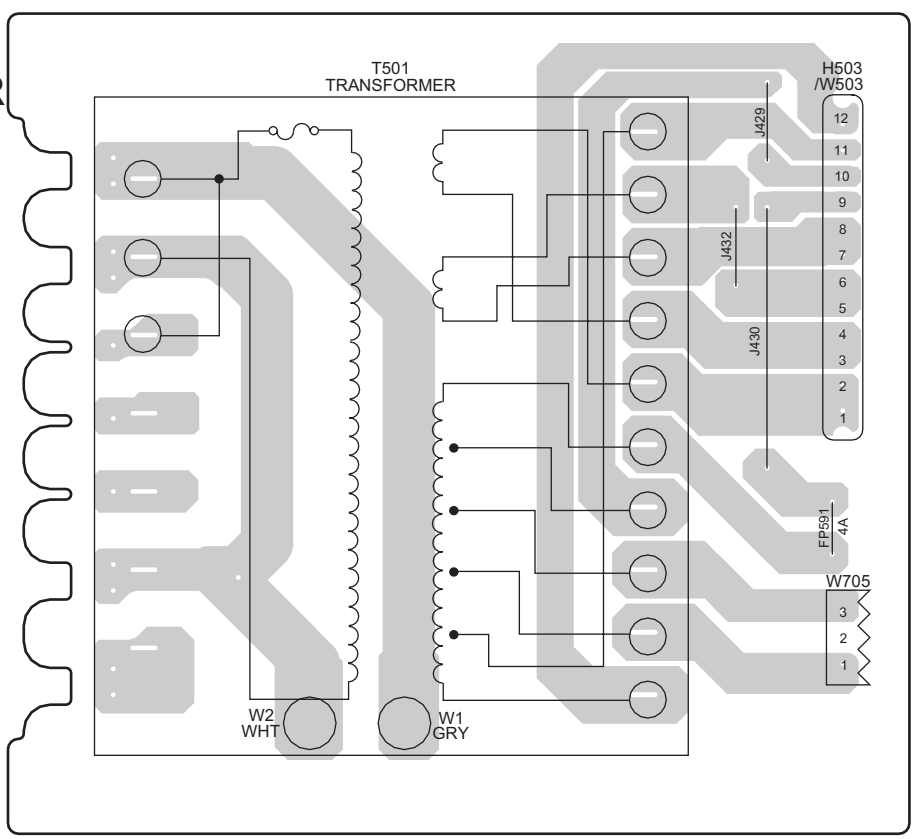
A B C D E F G

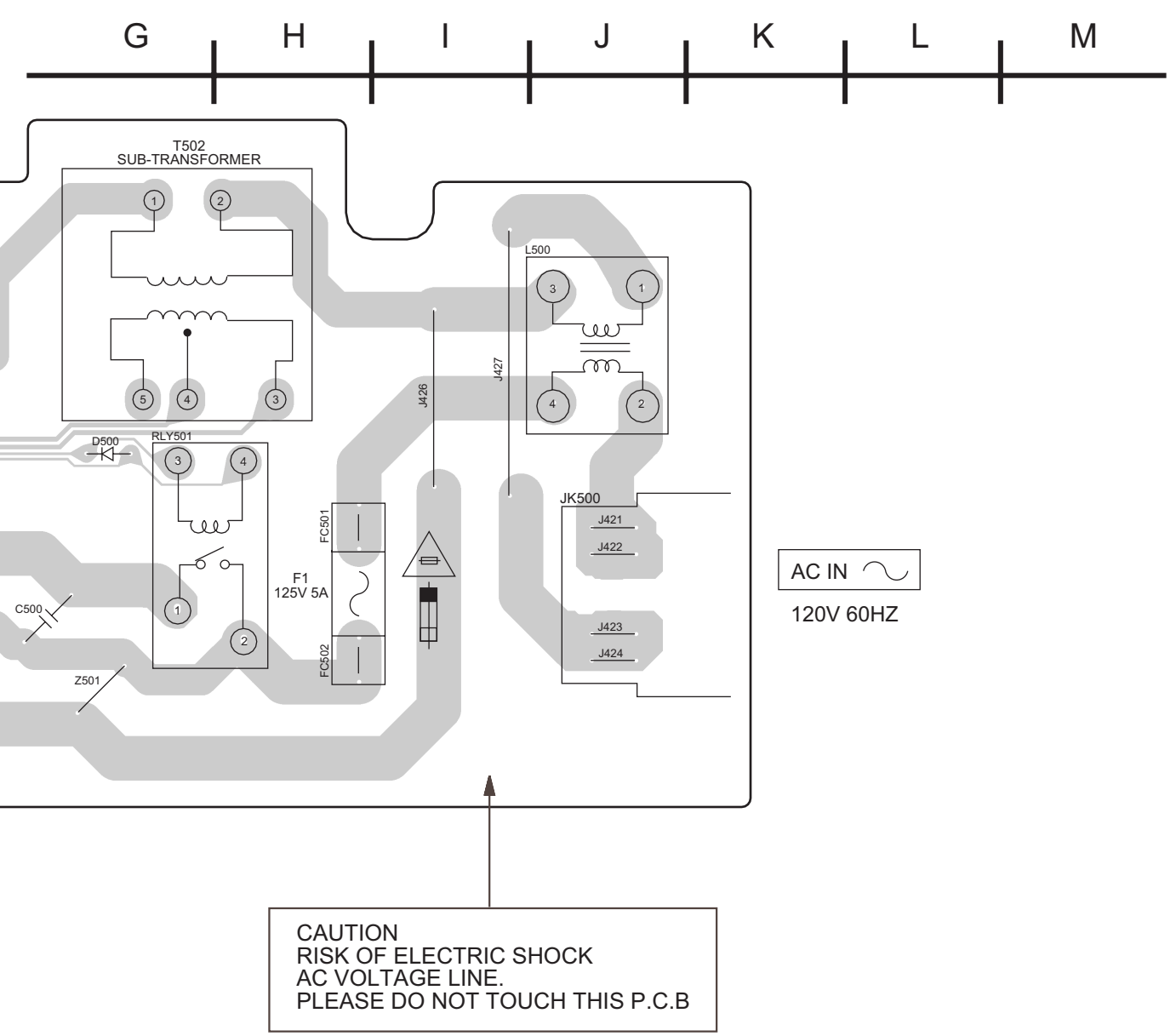
1 2 3 4 5 6 7 8 9

O
INLET P.C.B
(REPX0394B)



N
TRANSFORMER
P.C.B
(REPX0394B)




G
H
I
J
K
L
M
T502
SUB-TRANSFORMER
1
2
5
4
3
L500
3
1
4
2
J427
J426
D500
RLY501
3
4
1
2
FC501
F1
125V 5A
FC502
C500
Z501
JK500
J421
J422
J423
J424
AC IN
120V 60HZ
CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE.
PLEASE DO NOT TOUCH THIS P.C.B

SCHEMATIC DIAGRAM-1

Component Side

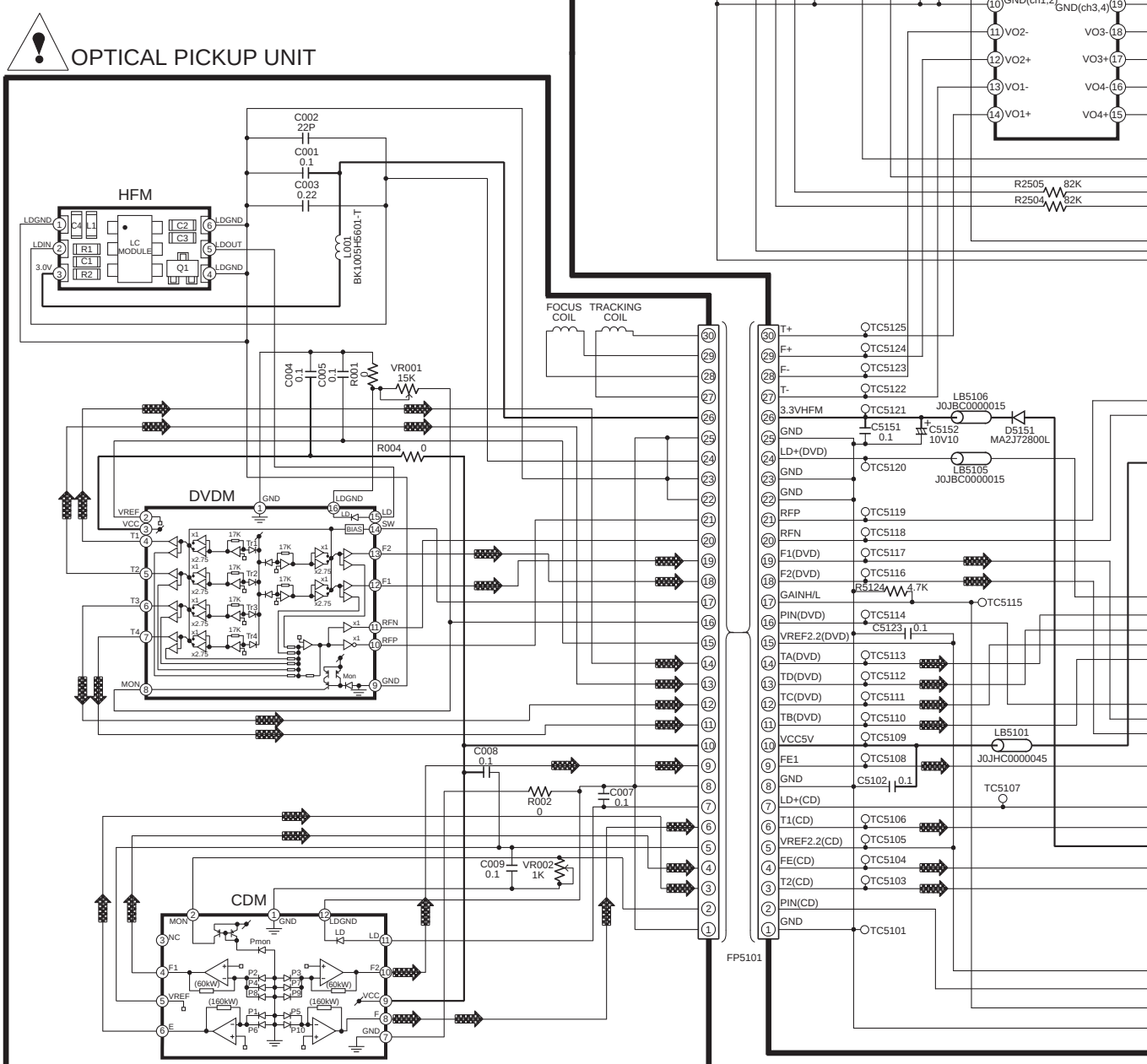
Foil Side

A DVD MODULE (1) CIRCUIT

: CD-DA SIGNAL LINE

: +B SIGNAL LINE

OPTICAL PICKUP UNIT

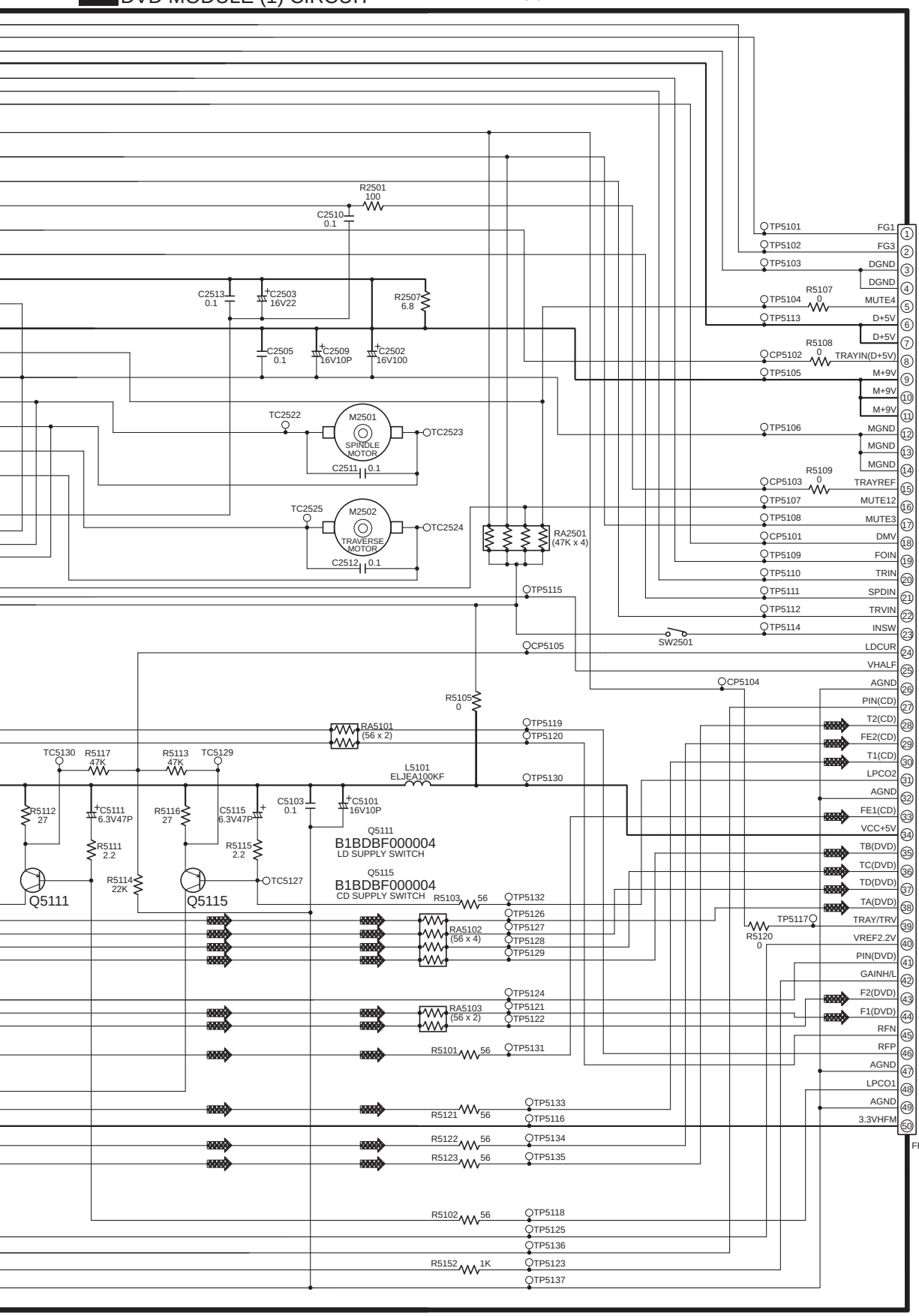


SCHEMATIC DIAGRAM-2

A DVD MODULE (1) CIRCUIT

: CD-DA SIGNAL LINE

: +B SIGNAL LINE



SCHEMATIC DIAGRAM - 3

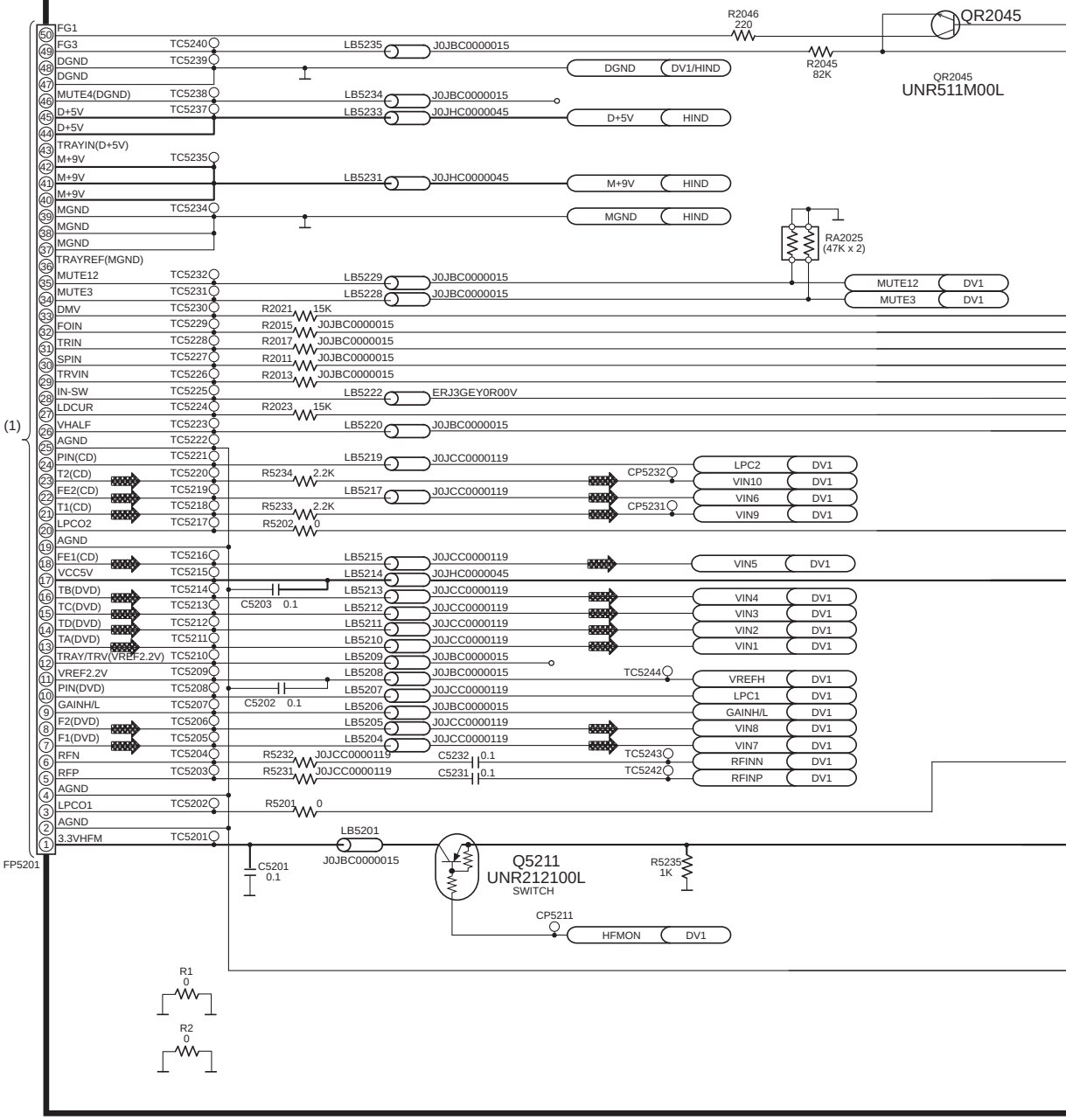
Side A

Side B

B DVD MODULE 2 (FORE) CIRCUIT

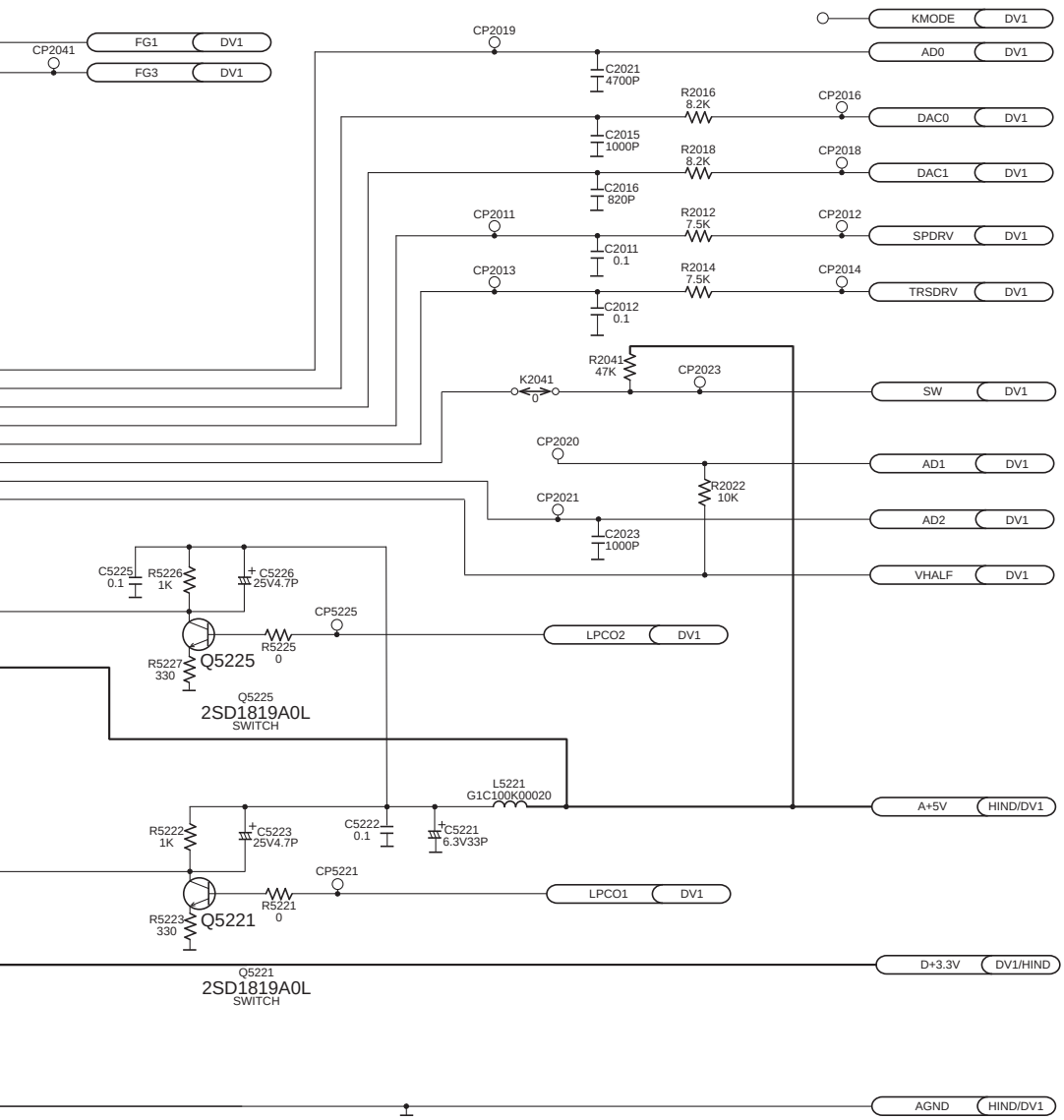
: CD-DA SIGNAL LINE

: +B SIGNAL LINE



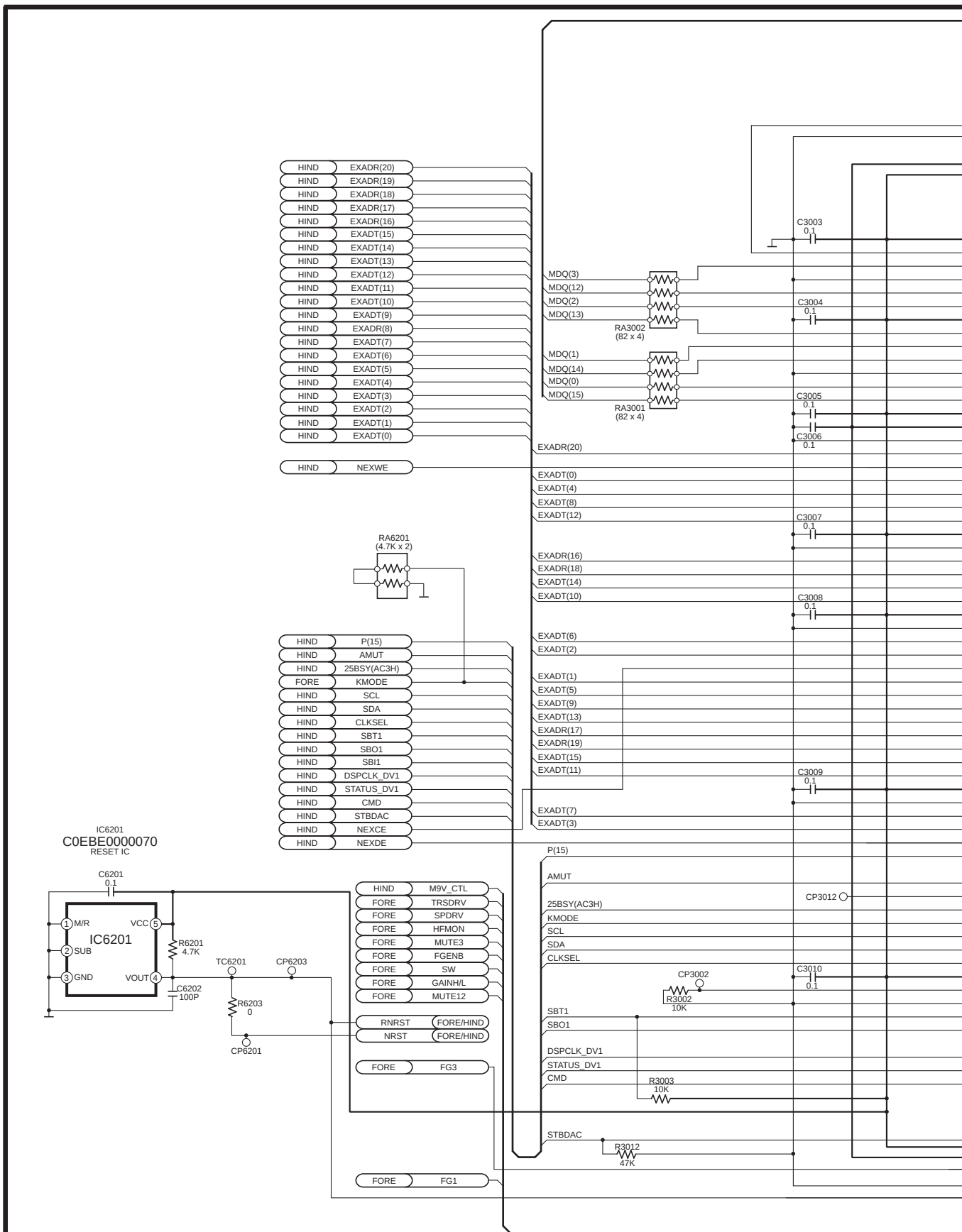
B DVD MODULE 2 (FORE) CIRCUIT

——— : +B SIGNAL LINE



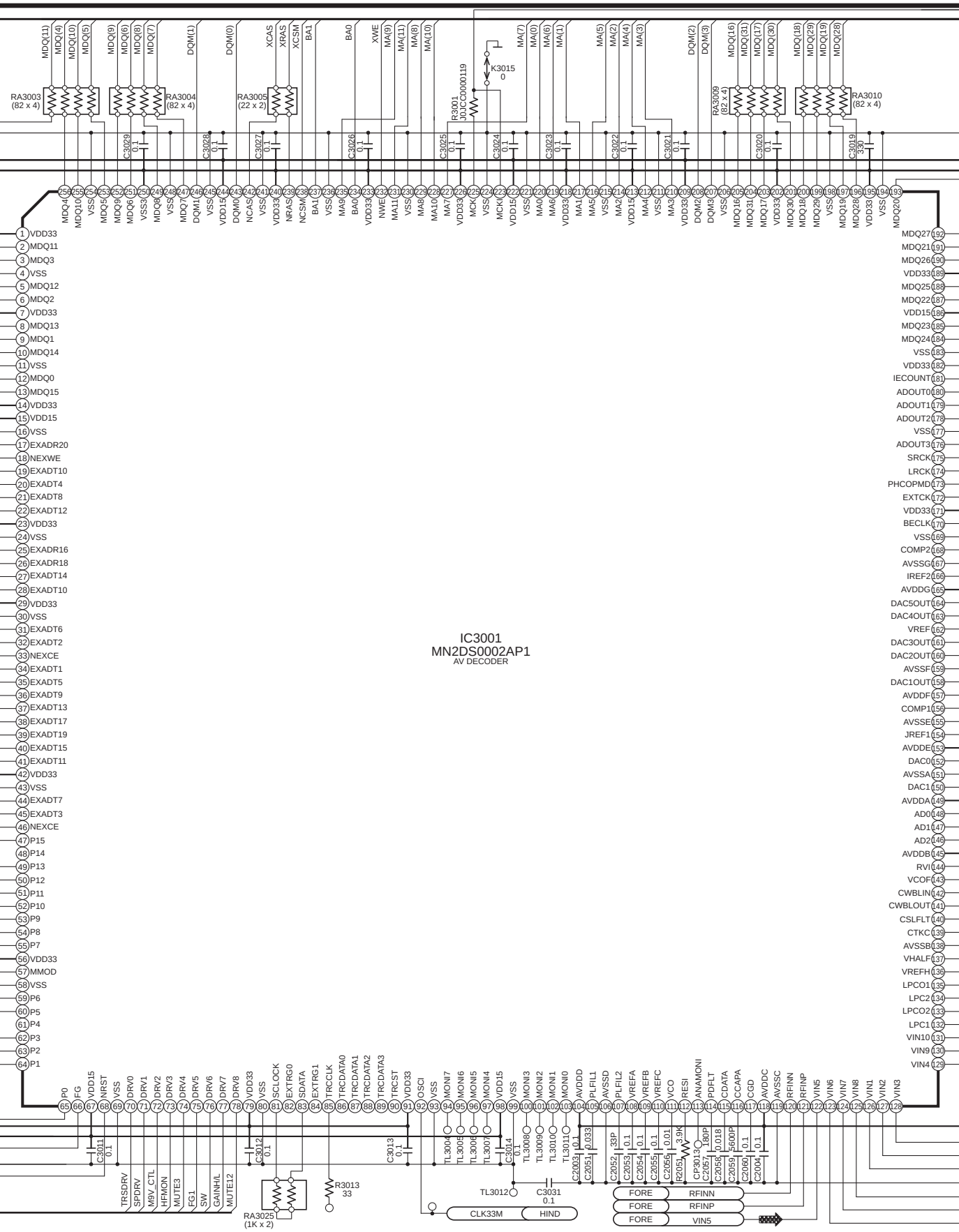
B DVD MODULE 2 (DV1) CIRCUIT

——— : +B SIGNAL LINE



B DVD MODULE 2 (DV1) CIRCUIT

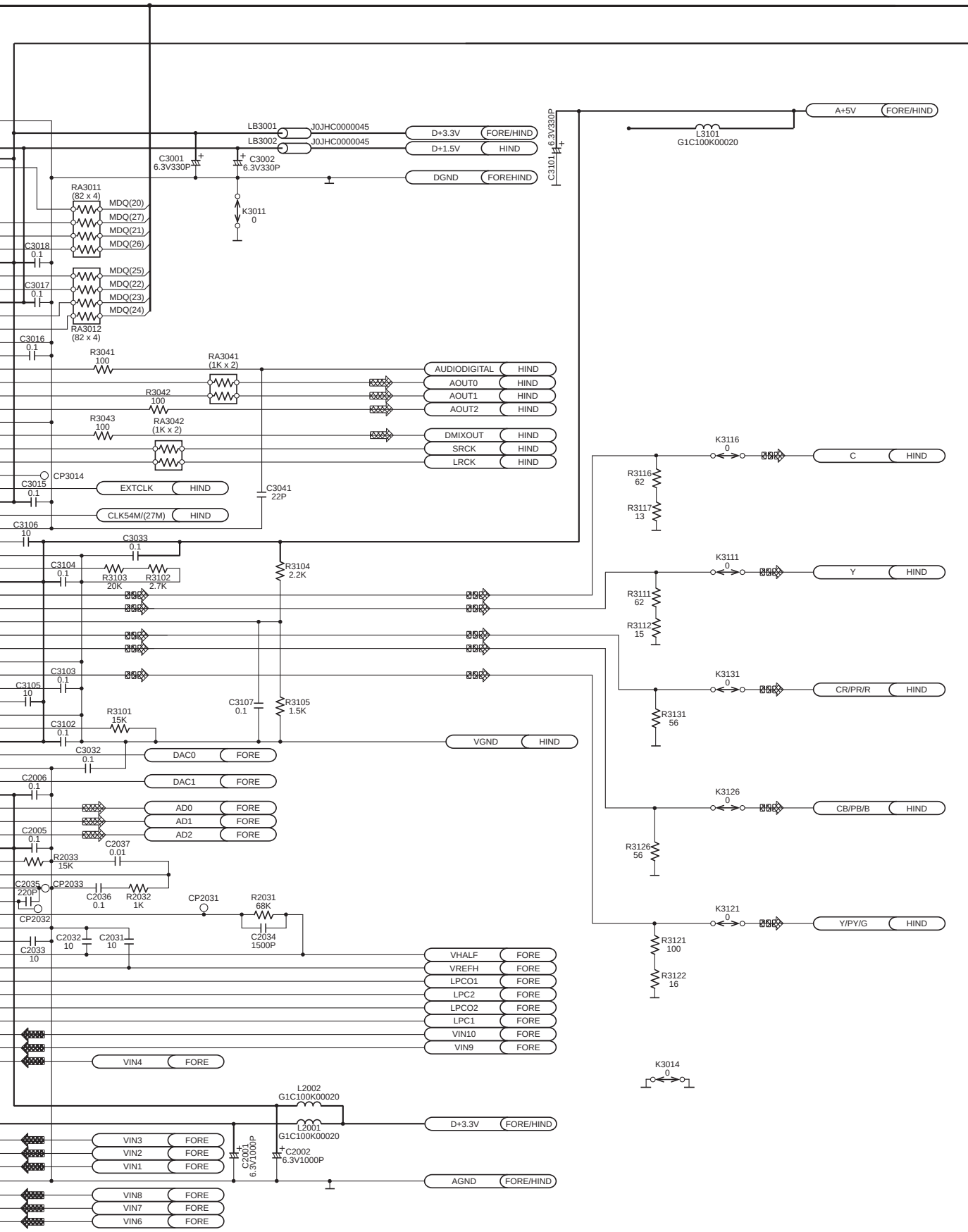
: CD-DA SIGNAL LINE
: +B SIGNAL LINE



SCHEMATIC DIAGRAM - 7

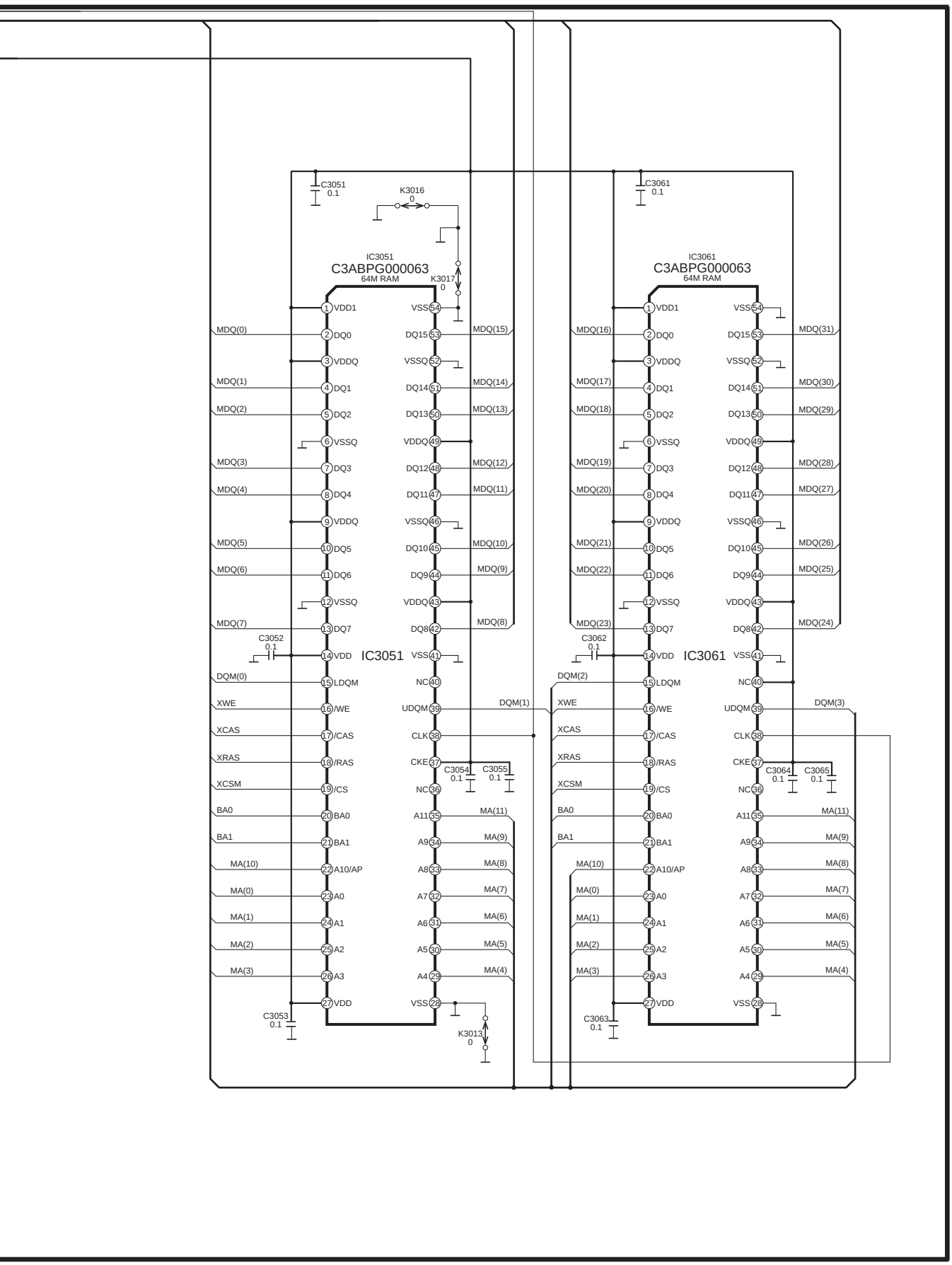
B DVD MODULE 2 (DV1) CIRCUIT

: CD-DA SIGNAL LINE
: +B SIGNAL LINE
: DVD (AUDIO) SIGNAL LINE
: DVD (VIDEO) SIGNAL LINE



B DVD MODULE 2 (DV1) CIRCUIT

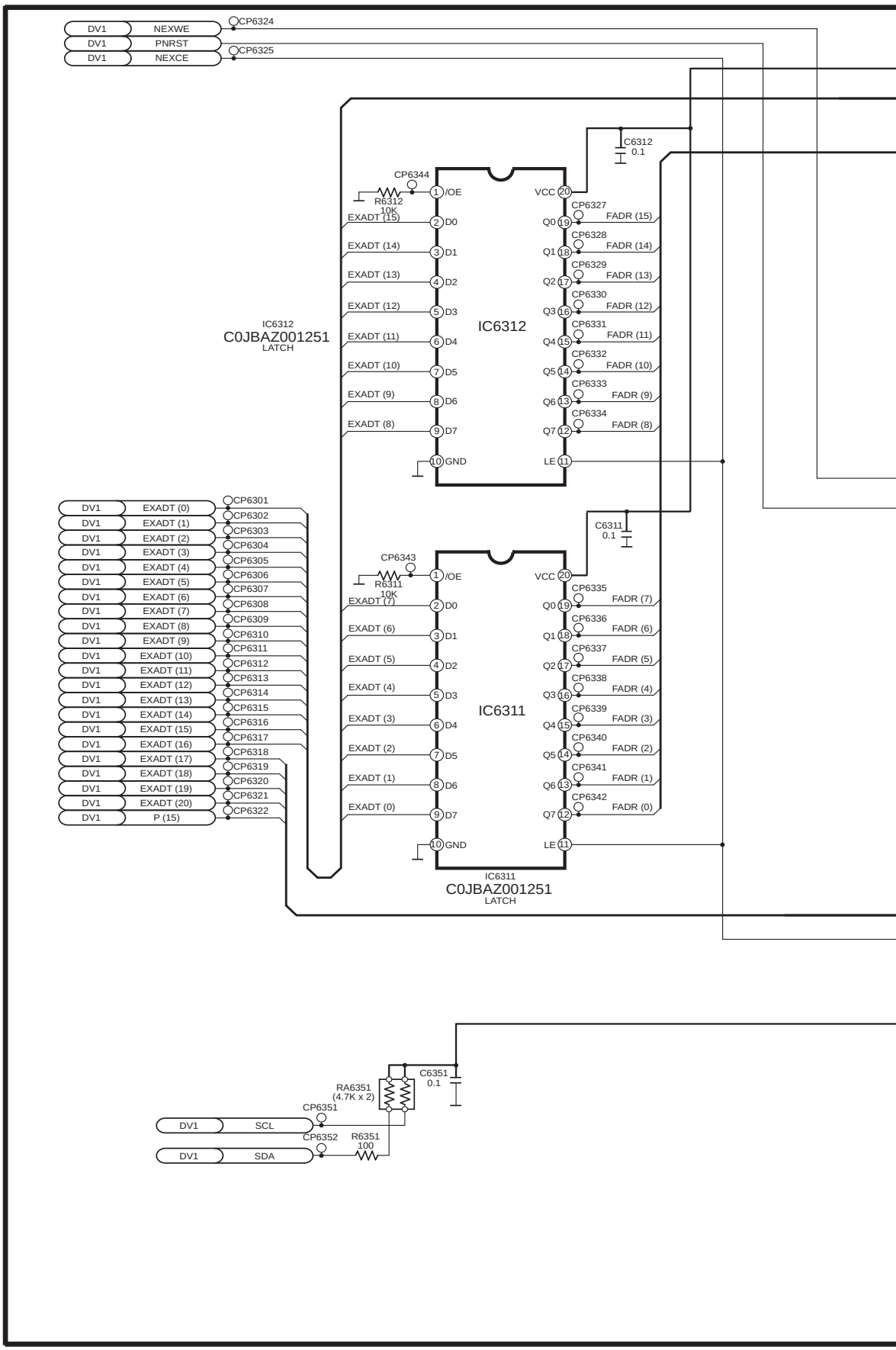
——— : +B SIGNAL LINE



SCHEMATIC DIAGRAM - 9

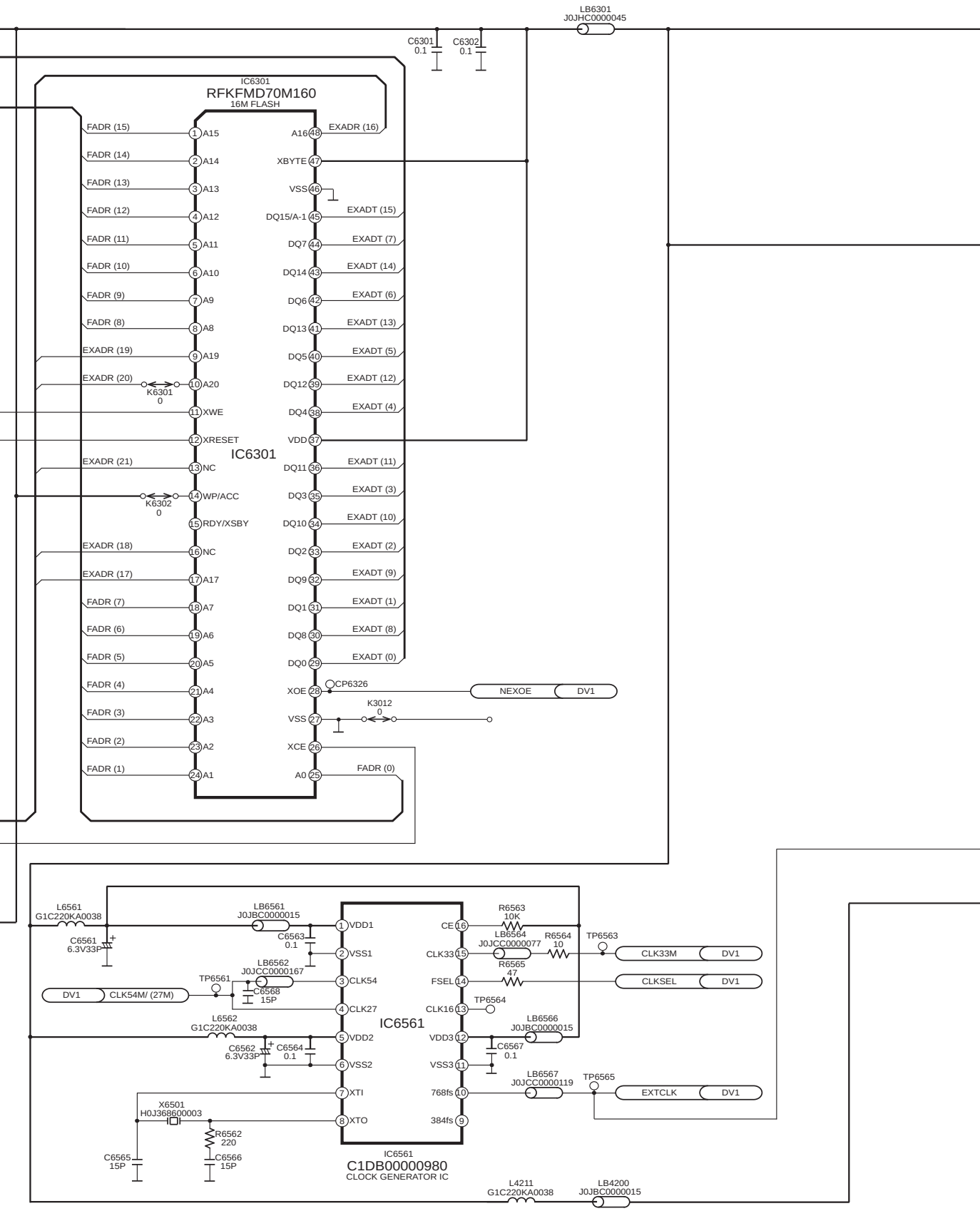
B DVD MODULE 2 (HIND) CIRCUIT

——— : +B SIGNAL LINE



B DVD MODULE 2 (HIND) CIRCUIT

: +B SIGNAL LINE

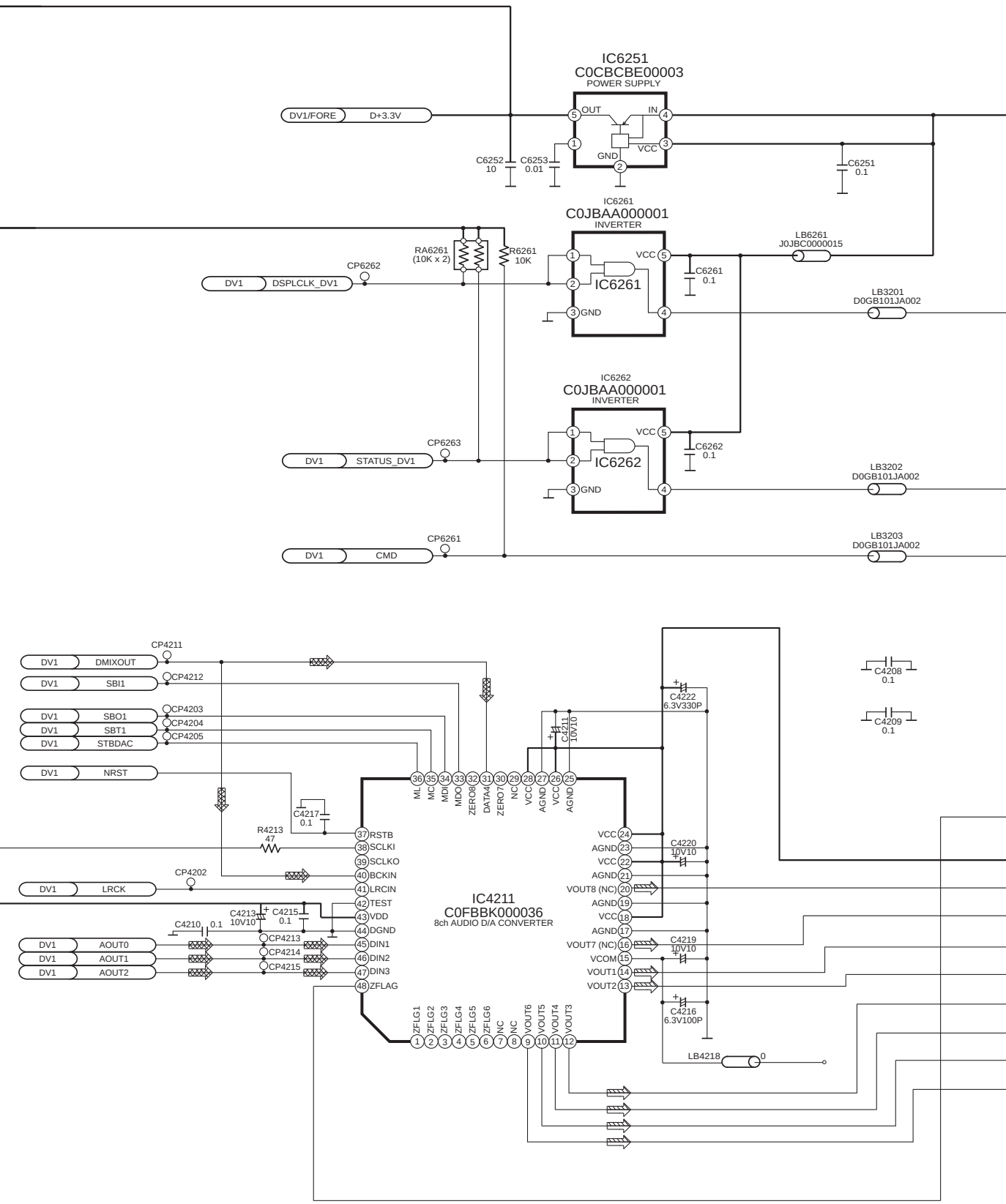


B DVD MODULE 2 (HIND) CIRCUIT

: +B SIGNAL LINE

: MAIN SIGNAL LINE

: DVD (AUDIO) SIGNAL LINE



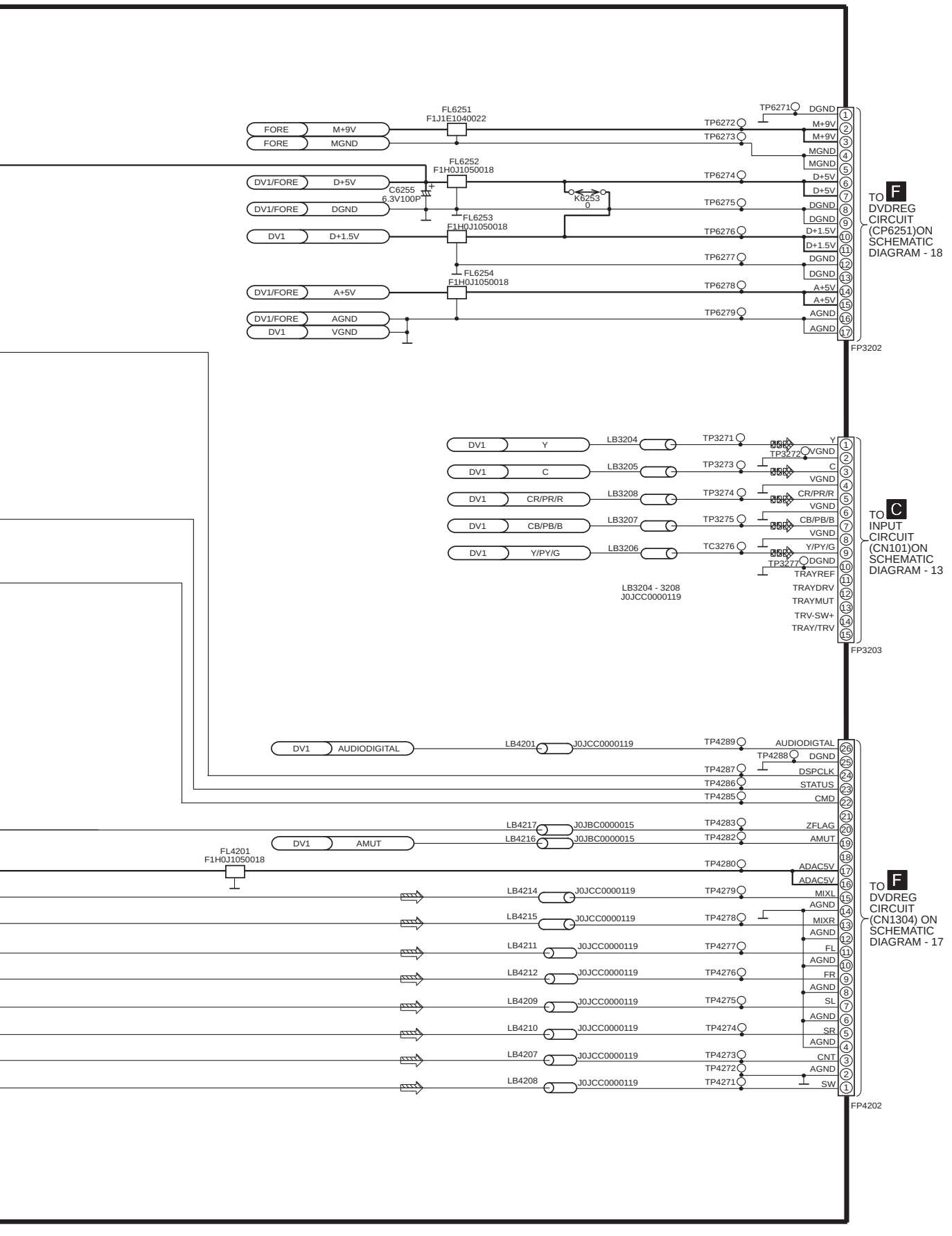
SCHEMATIC DIAGRAM - 12

B DVD MODULE 2 (HIND) CIRCUIT

: +B SIGNAL LINE

: DVD (VIDEO) SIGNAL LINE

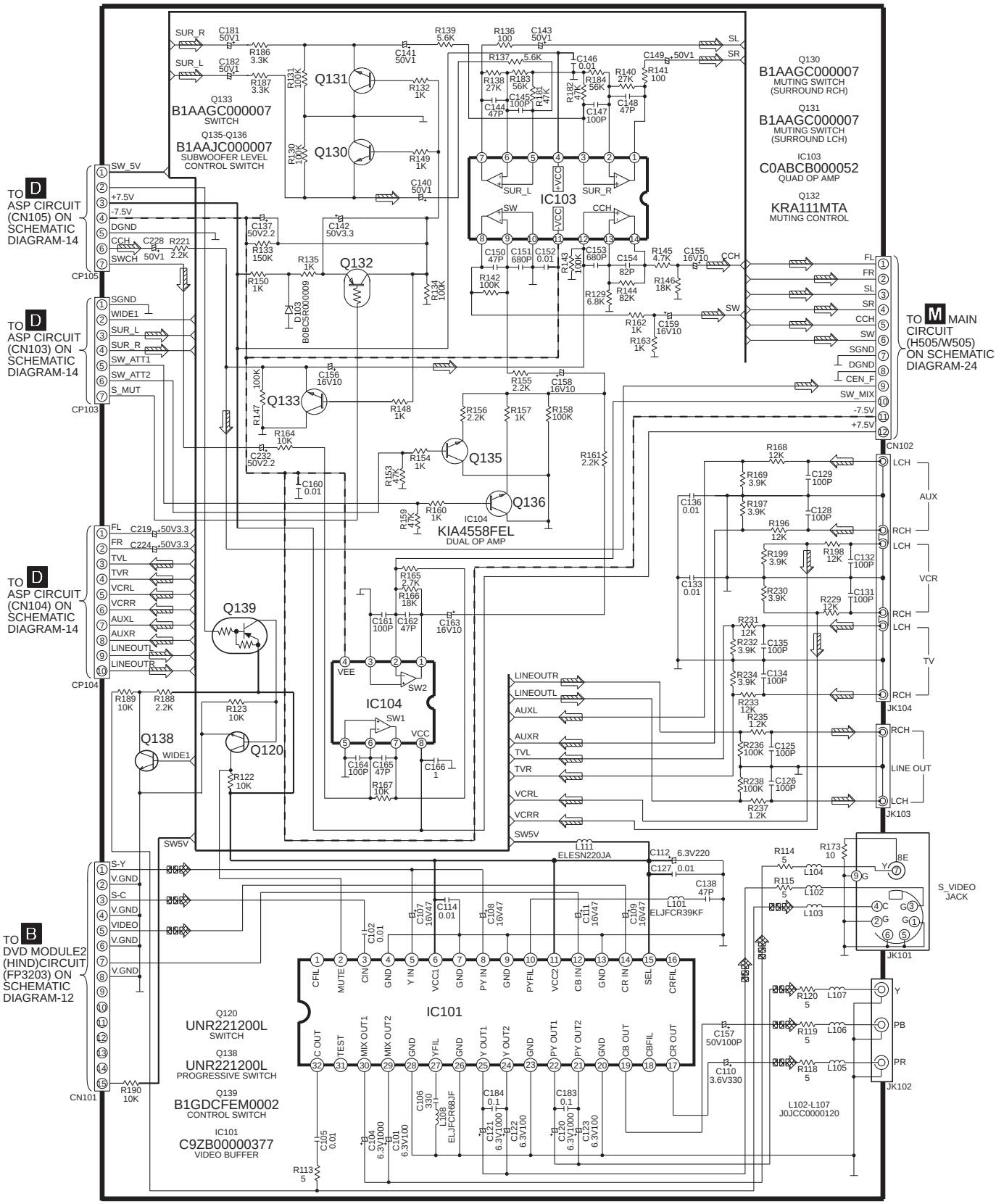
: MAIN SIGNAL LINE



SCHEMATIC DIAGRAM - 13

—— : +B SIGNAL LINE – – : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE ⇨ : DVD(VIDEO) SIGNAL LINE

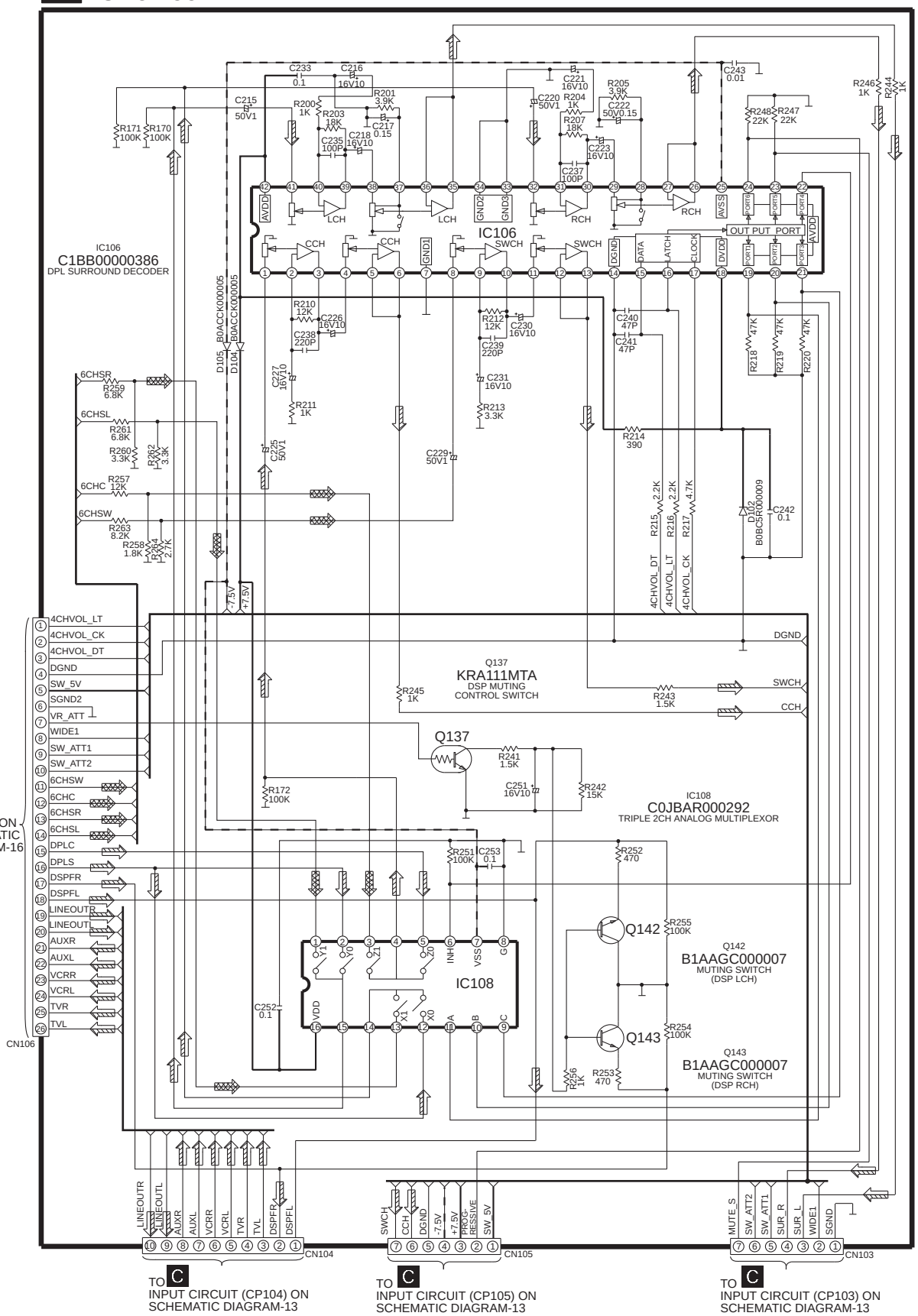
C INPUT CIRCUIT


TO D ASP CIRCUIT (CN105) ON SCHEMATIC DIAGRAM-14
TO D ASP CIRCUIT (CN103) ON SCHEMATIC DIAGRAM-14
TO D ASP CIRCUIT (CN104) ON SCHEMATIC DIAGRAM-14
TO B DVD MODULE2 (HIND)CIRCUIT (FP3203) ON SCHEMATIC DIAGRAM-12
TO M MAIN CIRCUIT (H505/W505) ON SCHEMATIC DIAGRAM-24
Q133 B1AAGC000007 SWITCH
Q135-Q136 B1AAJC000007 SUBWOOFER LEVEL CONTROL SWITCH
Q130 B1AAGC000007 MUTING SWITCH (SURROUND RCH)
Q131 B1AAGC000007 MUTING SWITCH (SURROUND LCH)
IC103 C0ABCB000052 QUAD OP AMP
Q132 KRA111MTA MUTING CONTROL
IC104 KIA4558FEL DUAL OP AMP
IC101 C9ZB00000377 VIDEO BUFFER
Q120 UNR221200L SWITCH
Q138 UNR221200L PROGRESSIVE SWITCH
Q139 B1GDCFEM0002 CONTROL SWITCH
L102-L107 J0JCC0000120
S_VIDEO JACK
AUX
VCR
TV
LINE OUT

SCHEMATIC DIAGRAM - 14

D ASP CIRCUIT

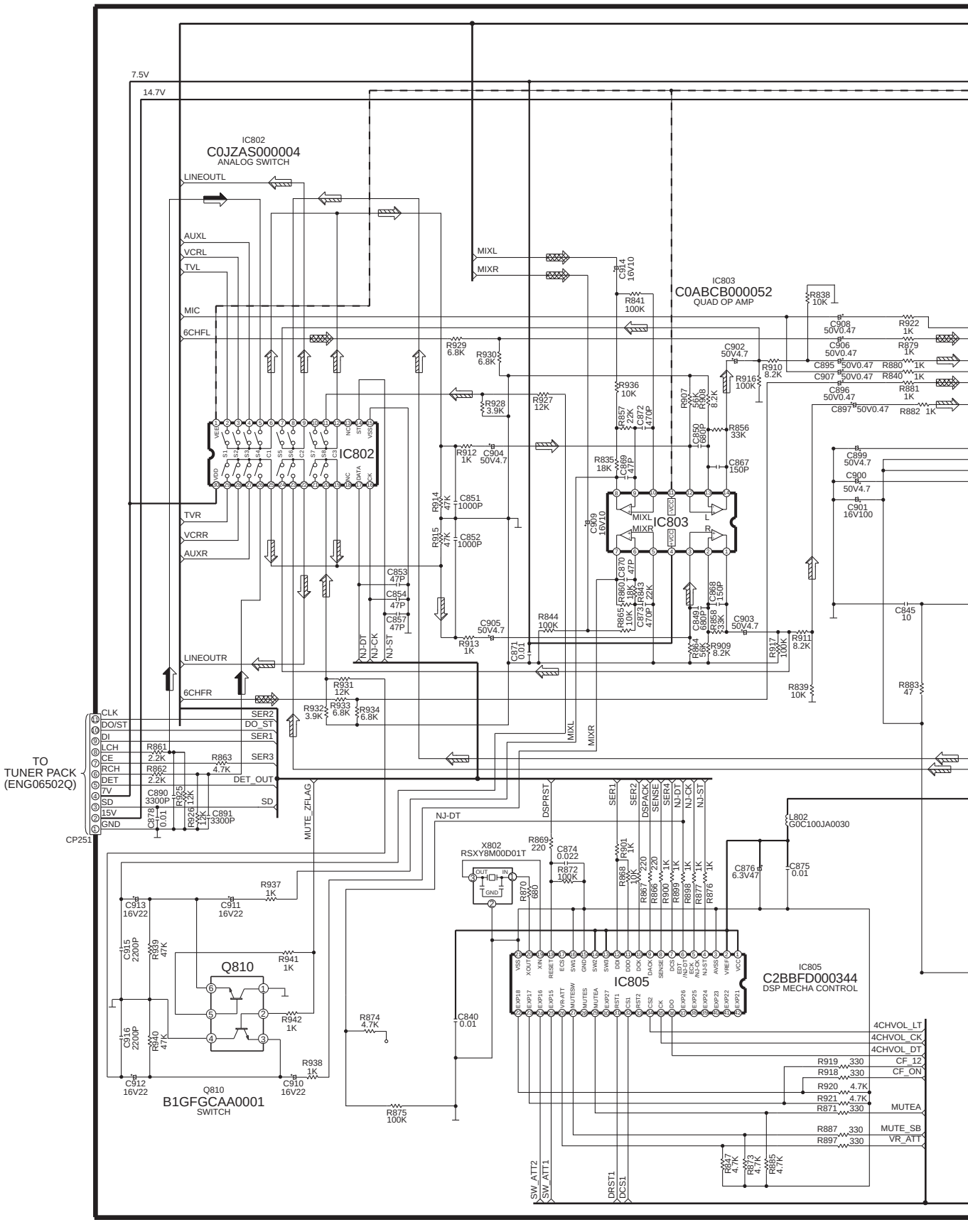
—— : +B SIGNAL LINE – – : -B SIGNAL LINE : DVD (AUDIO) SIGNAL LINE : MAIN SIGNAL LINE



SCHEMATIC DIAGRAM - 15

E DSP CIRCUIT

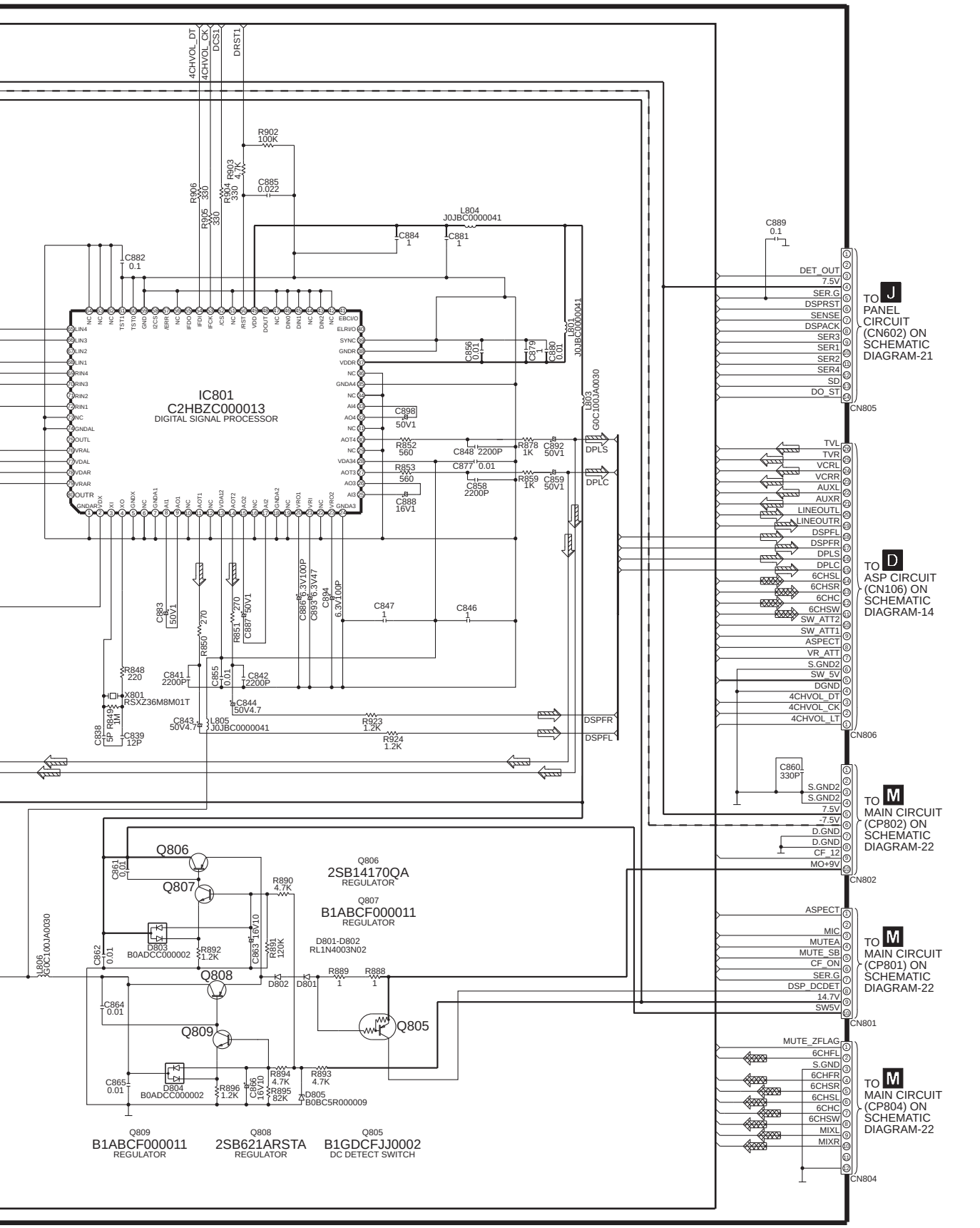
: +B SIGNAL LINE : -B SIGNAL LINE : FM/AM SIGNAL LINE : MAIN SIGNAL LINE
: DVD (AUDIO) SIGNAL LINE



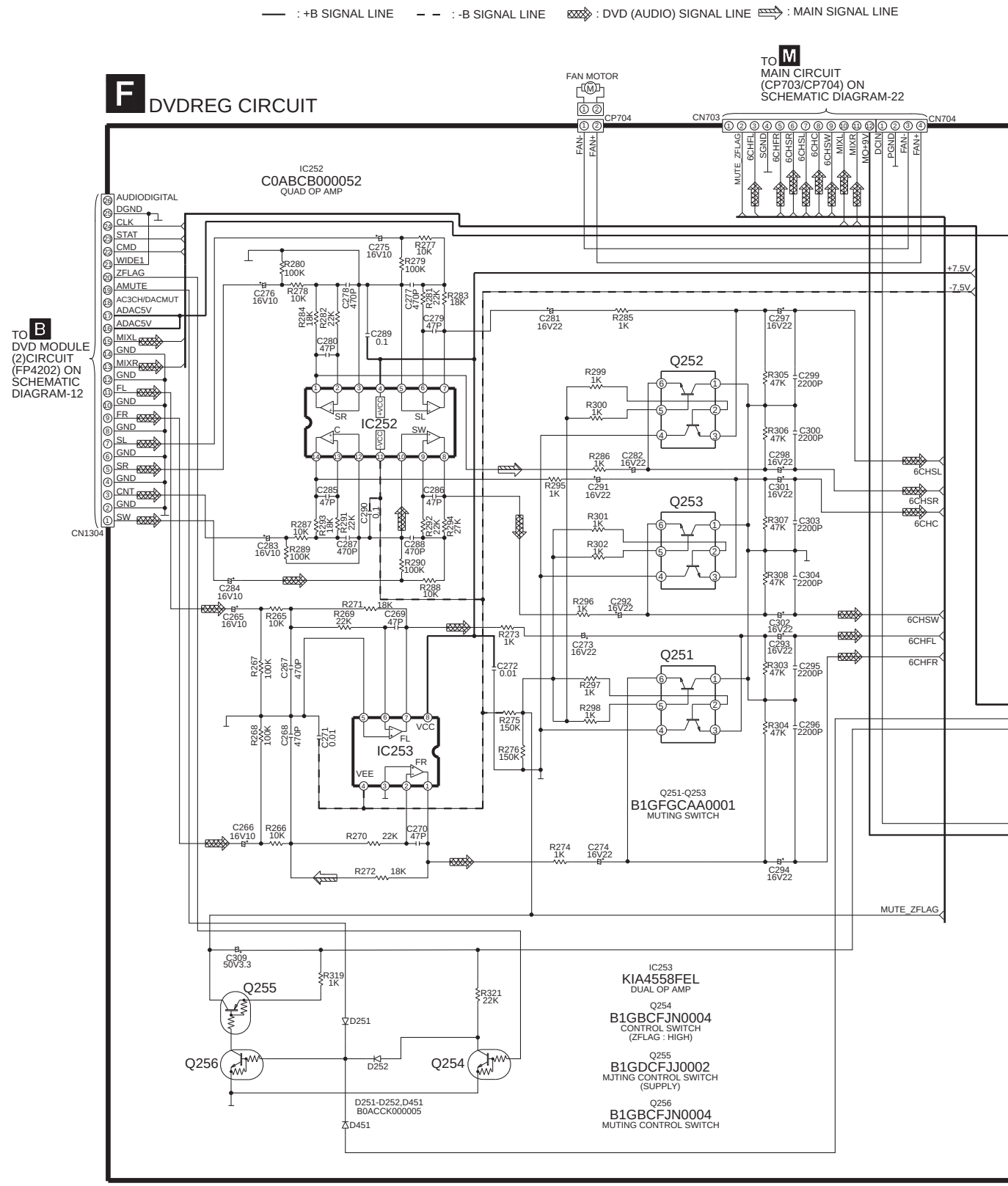
SCHEMATIC DIAGRAM - 16

E DSP CIRCUIT

—— : +B SIGNAL LINE – – : -B SIGNAL LINE : DVD (AUDIO) SIGNAL LINE : MAIN SIGNAL LINE



SCHEMATIC DIAGRAM - 17



SCHEMATIC DIAGRAM - 18

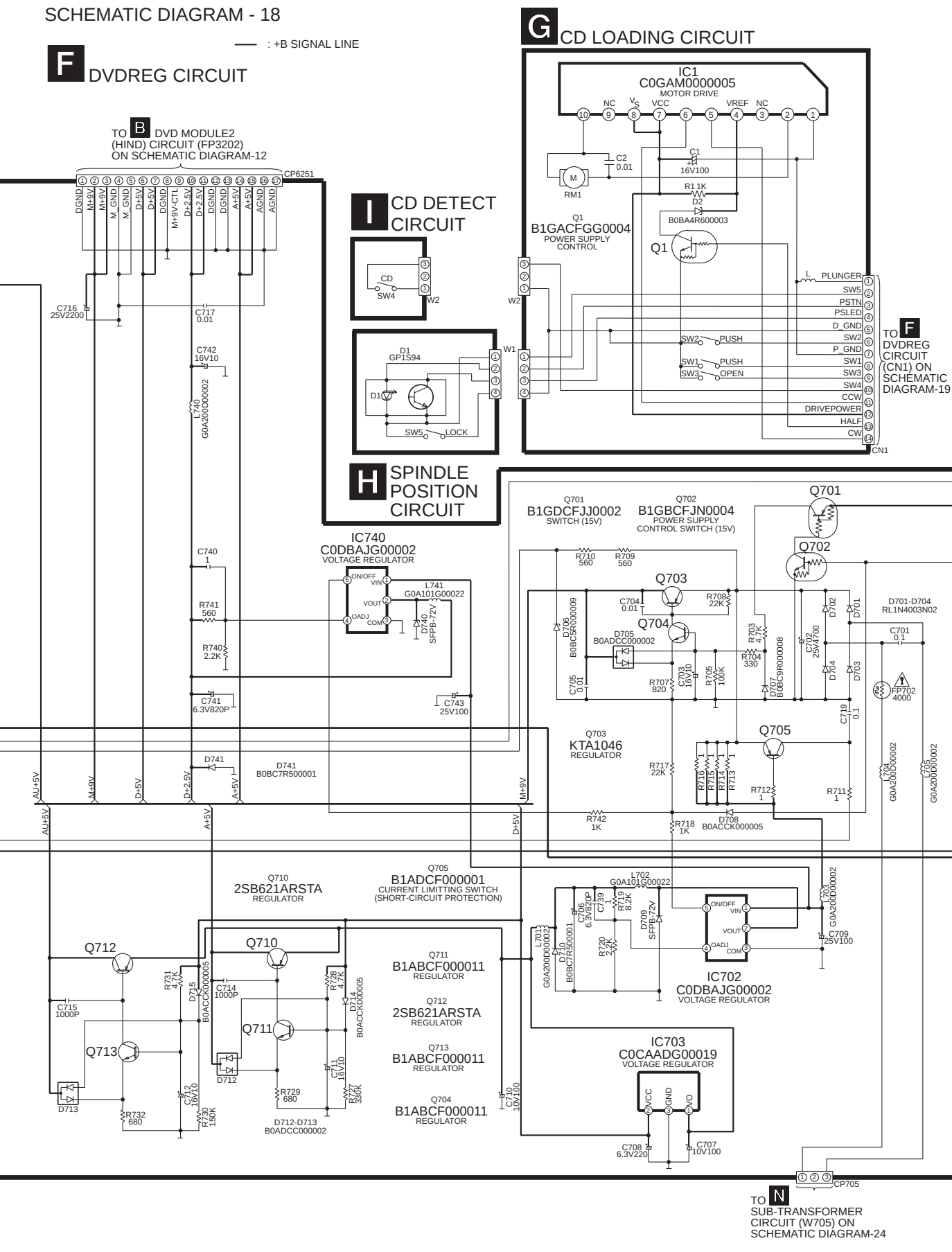
—— : +B SIGNAL LINE

F DVDREG CIRCUIT

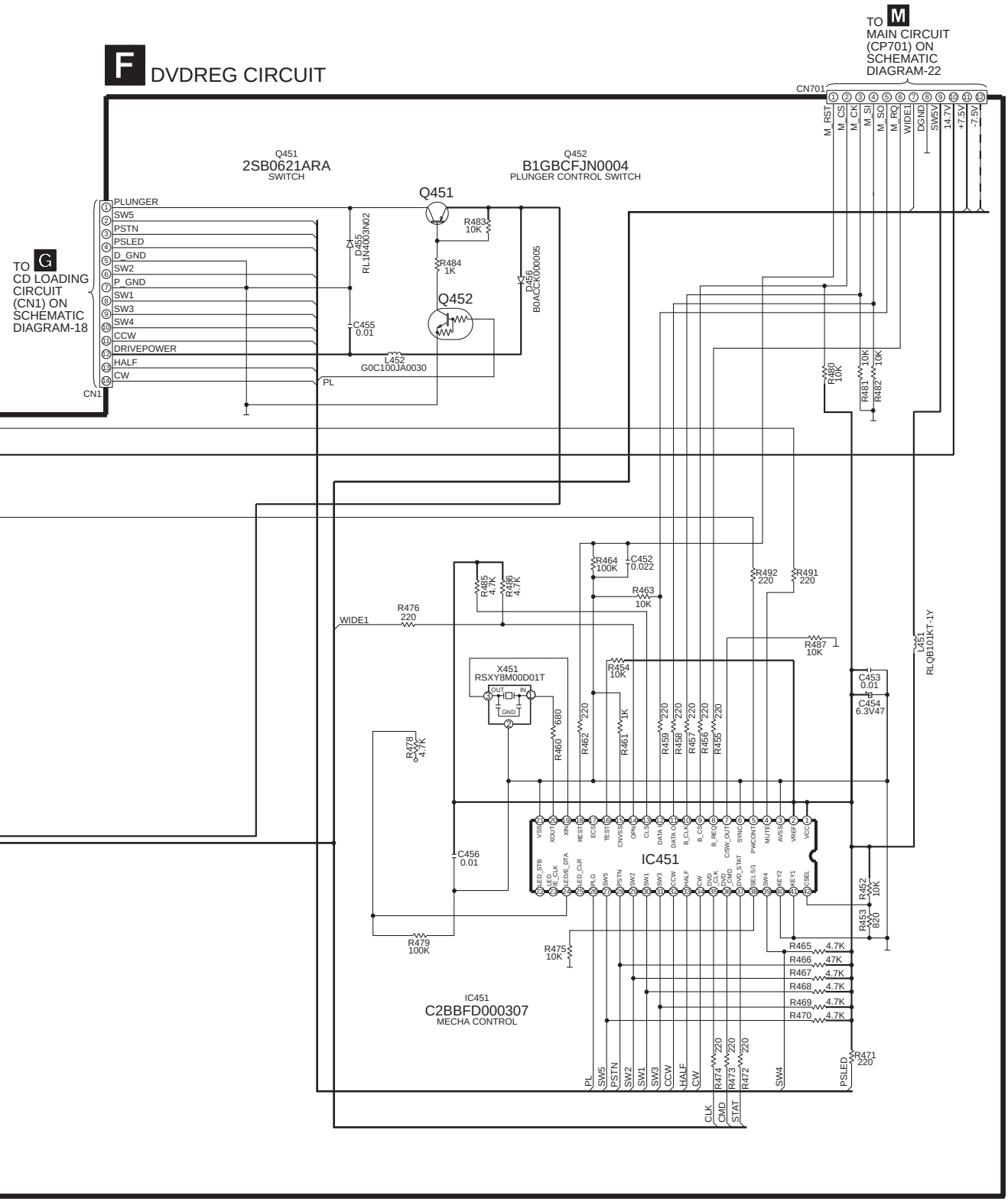
G CD LOADING CIRCUIT

I CD DETECT CIRCUIT

H SPINDLE POSITION CIRCUIT



—— : +B SIGNAL LINE – – : -B SIGNAL LINE



SCHEMATIC DIAGRAM - 20

—— : +B SIGNAL LINE – – : -B SIGNAL LINE ⇒ : MAIN SIGNAL LINE

K POWER SWITCH CIRCUIT

Q607
B1GDCFJJ0002
LED SUPPLY SWITCH
(SYSTEM 6.0V)

Q606
B1GBCFJJ0002
LED DRIVER
CONTROL SWITCH
(POWER ON/OFF LED)

R698 2.2K
R697 1.8K
R696 1.2K
R695 1K
R694 1K

S626 DISC 5
S625 DISC 4
S624 DISC 3
S623 DISC 2
S622 DISC 1
S621 POWER SW

D613
SLR325VCT31

R664
820

D614-D618
B3ACA0000220

R665 220
R666 220
R667 220
R668 220
R669 220

D614 D615 D616 D617 D618

Q608 Q609 Q610 Q611 Q612

Q608-Q612
B1GBCFJN0004
LED DRIVER
(DISC1-DISC5)

CN603B
KEY1
VREF-
SYS6V
PCONT
D.GND
DISC5
DISC4
DISC3
DISC2
DISC1

CN603A

J PANEL CIRCUIT

C623
35V22

D664-D665,D668
B0ACCK000005

D664
D665
D668

AND8/REG8
AND7/REG7
AND6/REG6
AND5/REG5
AND4/REG4
AND3/REG3
AND2/REG2
AND1/REG1
-VP
MECHSI
MECHSO
MECHCK
MECHRQ
MECHCS
MECRST
REG_IN
AVSS
VREF
NC
CRT

MECHSI R613 100
MECHSO R614 100
MECHCK R615 100
MECHRQ R616 100
MECHCS R617 100
MECHRS R618 100

C628 330P
R650 22K
C629 0.1
C630 10V22

D5_LED
D4_LED
D3_LED

R649
180

D612
B3ADA0000087

R607
220K

D601
B0ACCK000005

C604
16V10

C603 560P
C602 560P

Q605
B1GBCFJN0004
LED DRIVER
(WAKE)

Q605

Q604
B1GBCFJN0004
LED DRIVER
(PROGRESSIVE)

TO M
MAIN CIRCUIT
(CN904) ON
SCHEMATIC
DIAGRAM-24

W904

HEADPHONE

JK603

HPGND
HP SW
HPR
HPL
PHONE SW
D.GND

C921
1000P

L905-L910
J0JBC0000019

L905
L906
L907
L909
L910
L908

C918
0.047

C919
0.047

R956
22K

R955
22K

VREF
MIC
DGND
PHONE_SW
MICSW
5V
PHSW
HPL
HPGND
HPR
MICVR

CN604

TO M
MAIN CIRCUIT
(CN902)
ON SCHEMATIC
DIAGRAM-22

R692 10K
R691 6.8K
R690 4.7K
R689 2.7K
R688 2.2K
R687 1.8K
R686 1.2K
R685 1K

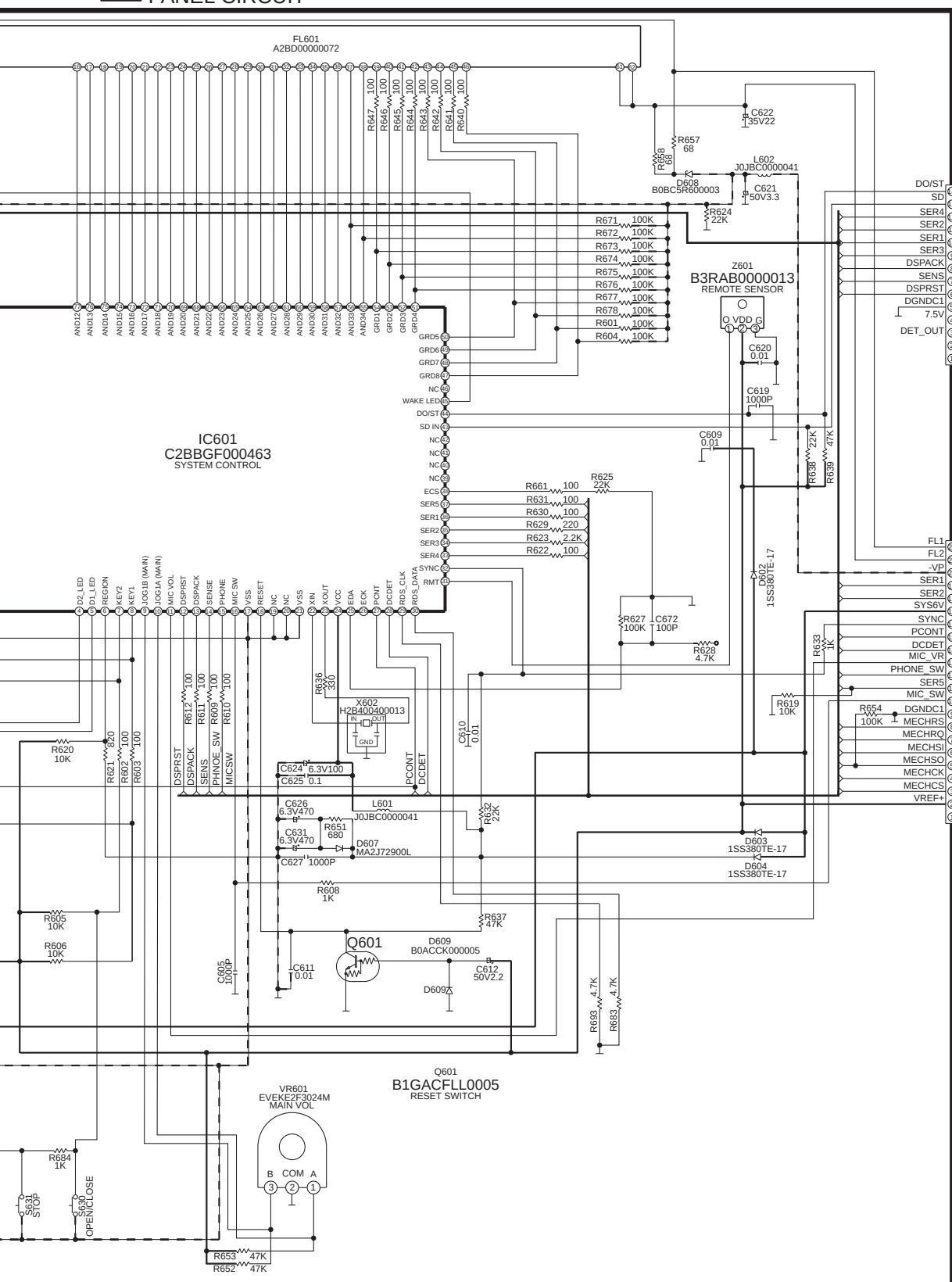
S639 DISC
S638 SEC
S637 SUBWOOFER LEVEL
S636 SELECTOR
S635 FWD
S634 RWD
S633 PLAY
S632 PAUSE

L HEADPHONE CIRCUIT

SCHEMATIC DIAGRAM - 21

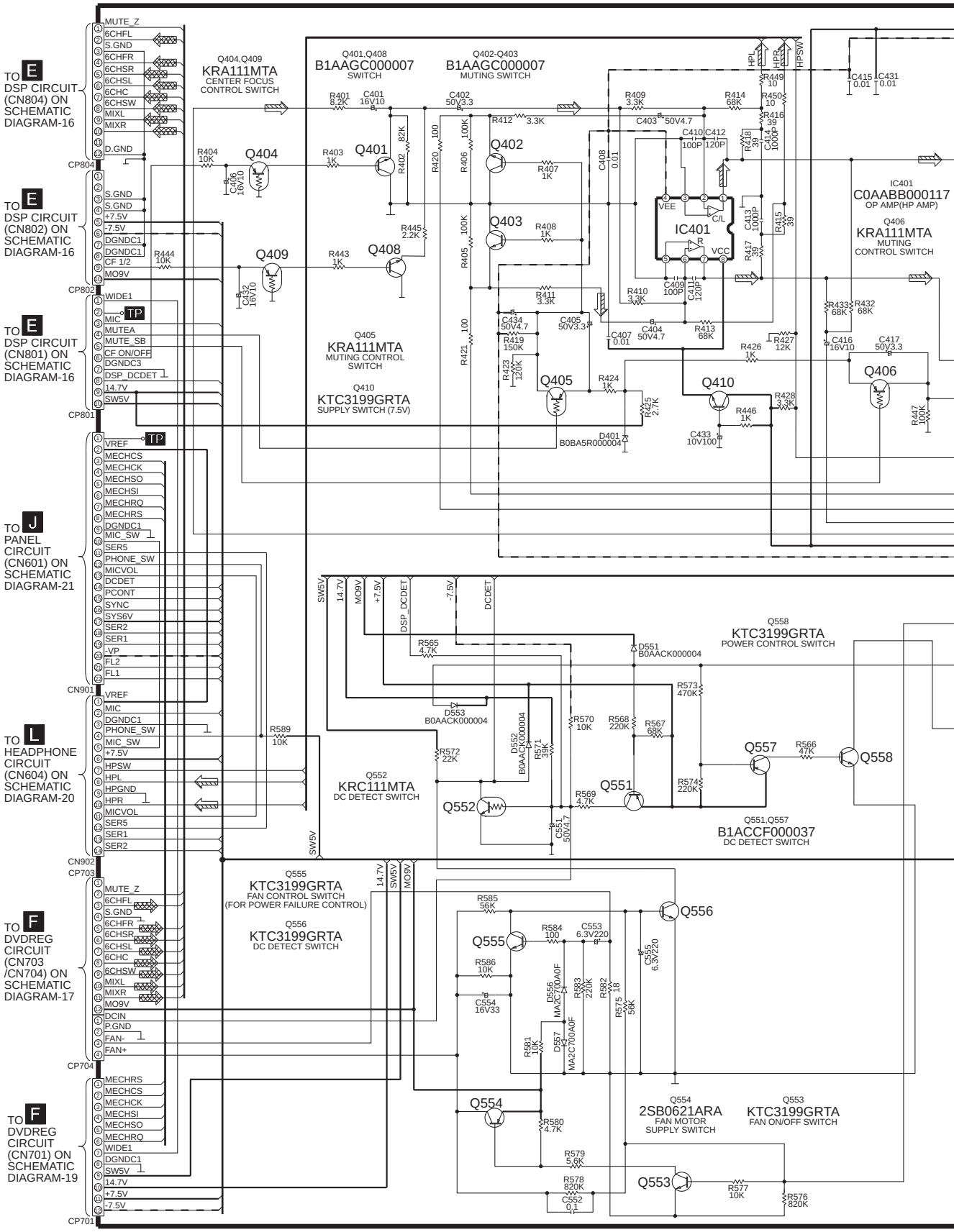
—— : +B SIGNAL LINE – – : -B SIGNAL LINE

J PANEL CIRCUIT



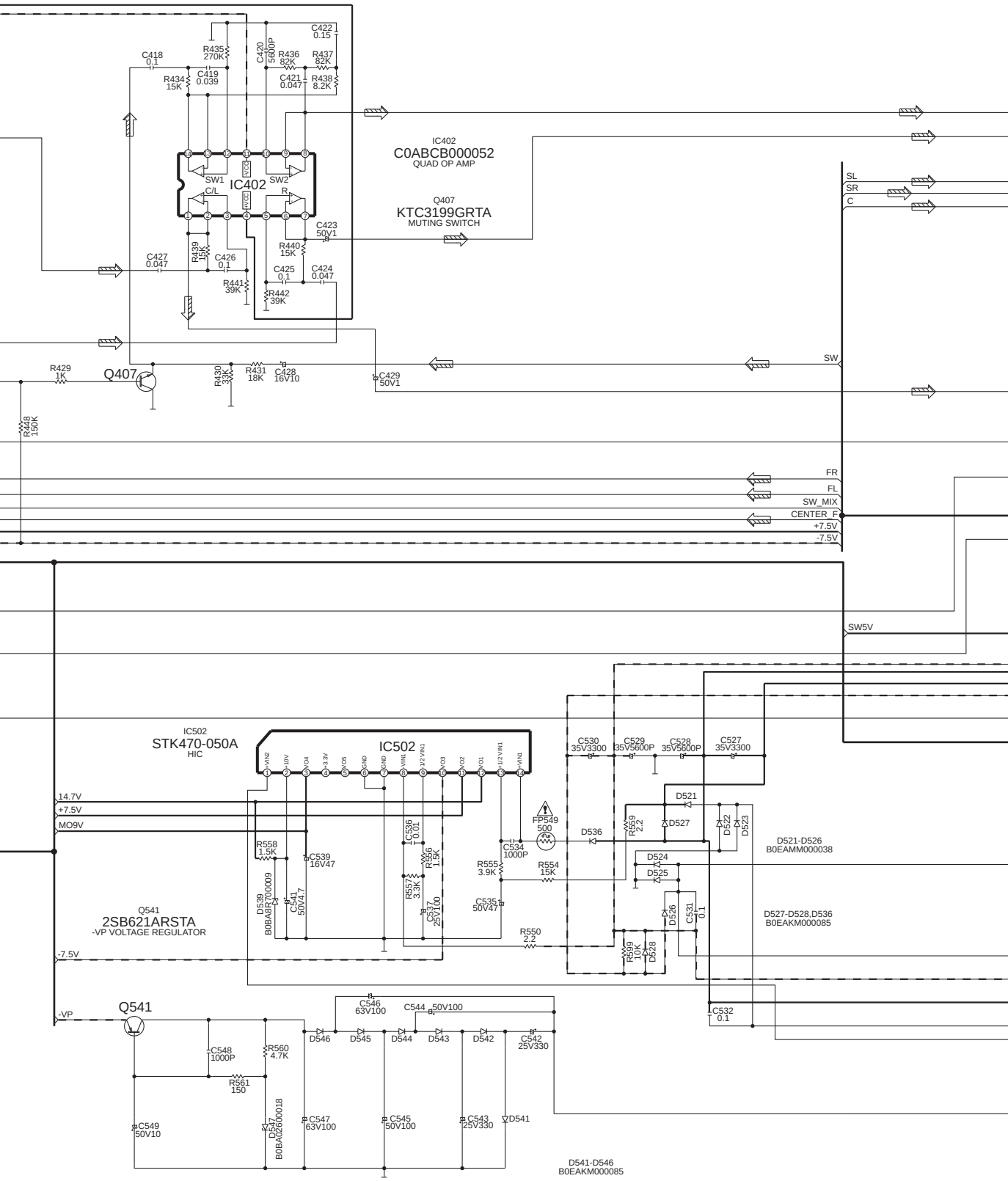
: +B SIGNAL LINE : -B SIGNAL LINE : DVD (AUDIO) SIGNAL LINE : MAIN SIGNAL LINE

M MAIN CIRCUIT


TO E DSP CIRCUIT (CN804) ON SCHEMATIC DIAGRAM-16
TO E DSP CIRCUIT (CN802) ON SCHEMATIC DIAGRAM-16
TO E DSP CIRCUIT (CN801) ON SCHEMATIC DIAGRAM-16
TO J PANEL CIRCUIT (CN601) ON SCHEMATIC DIAGRAM-21
TO L HEADPHONE CIRCUIT (CN604) ON SCHEMATIC DIAGRAM-20
TO F DVDREG CIRCUIT (CN703 /CN704) ON SCHEMATIC DIAGRAM-17
TO F DVDREG CIRCUIT (CN701) ON SCHEMATIC DIAGRAM-19
CP804
CP802
CP801
CN901
CN902
CP703
CP704
CP701
Q404,Q409 KRA111MTA CENTER FOCUS CONTROL SWITCH
Q401,Q408 B1AAGC000007 SWITCH
Q402-Q403 B1AAGC000007 MUTING SWITCH
Q405 KRA111MTA MUTING CONTROL SWITCH
Q410 KTC3199GRTA SUPPLY SWITCH (7.5V)
IC401 C0AABB000117 OP AMP(HP AMP)
Q406 KRA111MTA MUTING CONTROL SWITCH
D401 B0BA5R000004
Q552 KRC111MTA DC DETECT SWITCH
Q558 KTC3199GRTA POWER CONTROL SWITCH
D551 B0AACK000004
D553 B0AACK000004
Q551,Q557 B1ACCF000037 DC DETECT SWITCH
Q555 KTC3199GRTA FAN CONTROL SWITCH (FOR POWER FAILURE CONTROL)
Q556 KTC3199GRTA DC DETECT SWITCH
Q554 2SB0621ARA FAN MOTOR SUPPLY SWITCH
Q553 KTC3199GRTA FAN ON/OFF SWITCH

: +B SIGNAL LINE : -B SIGNAL LINE : MAIN SIGNAL LINE

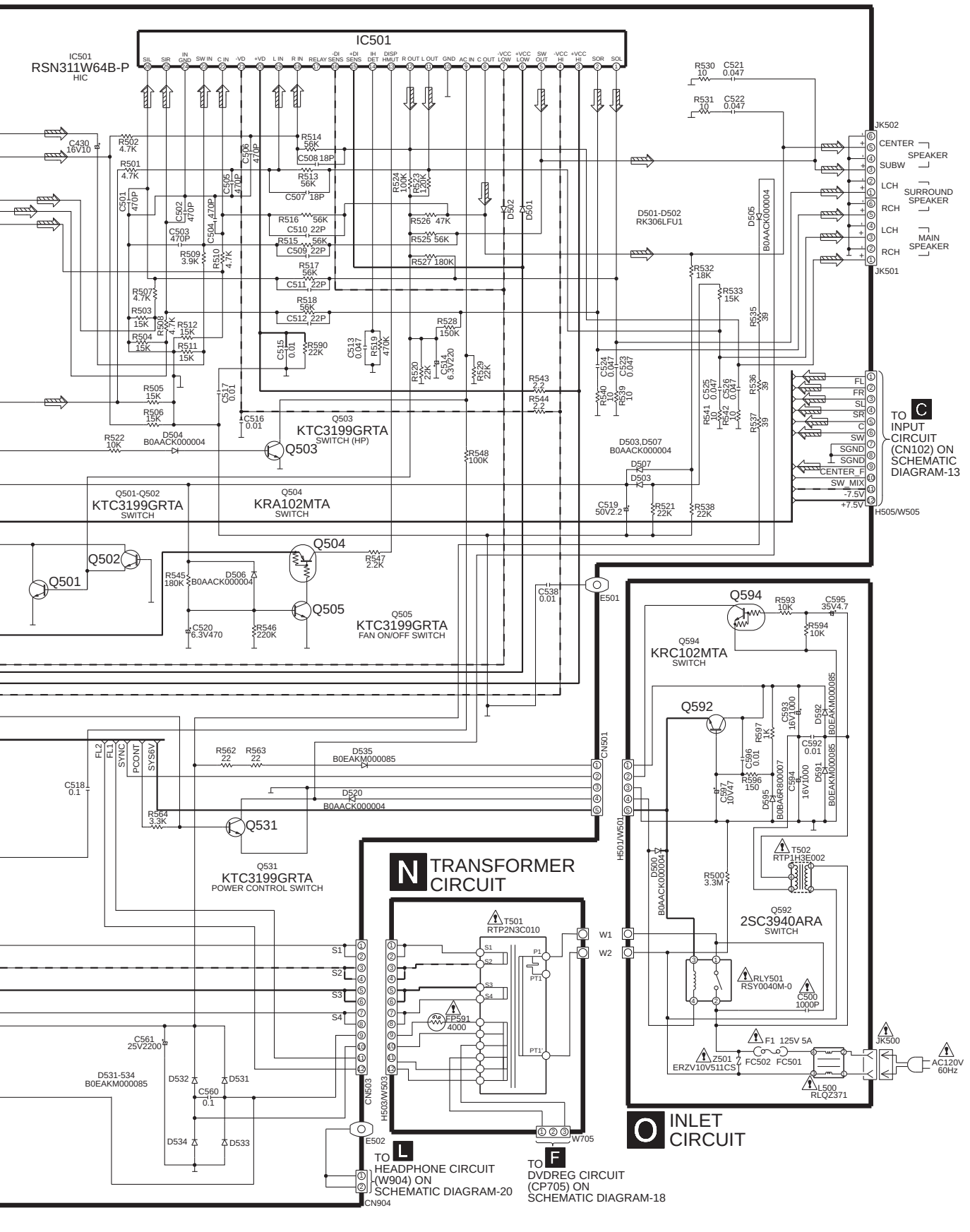
M MAIN CIRCUIT

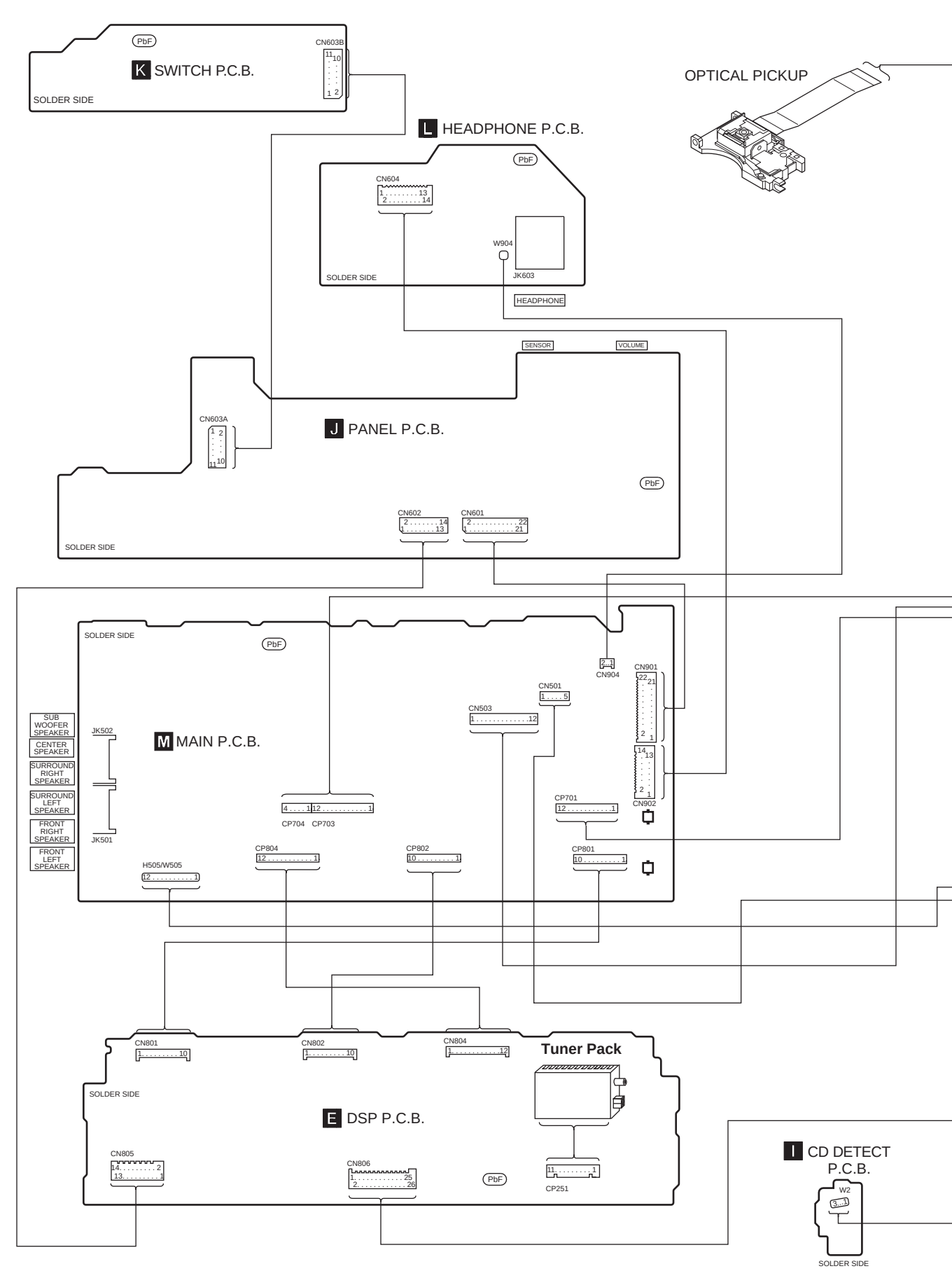


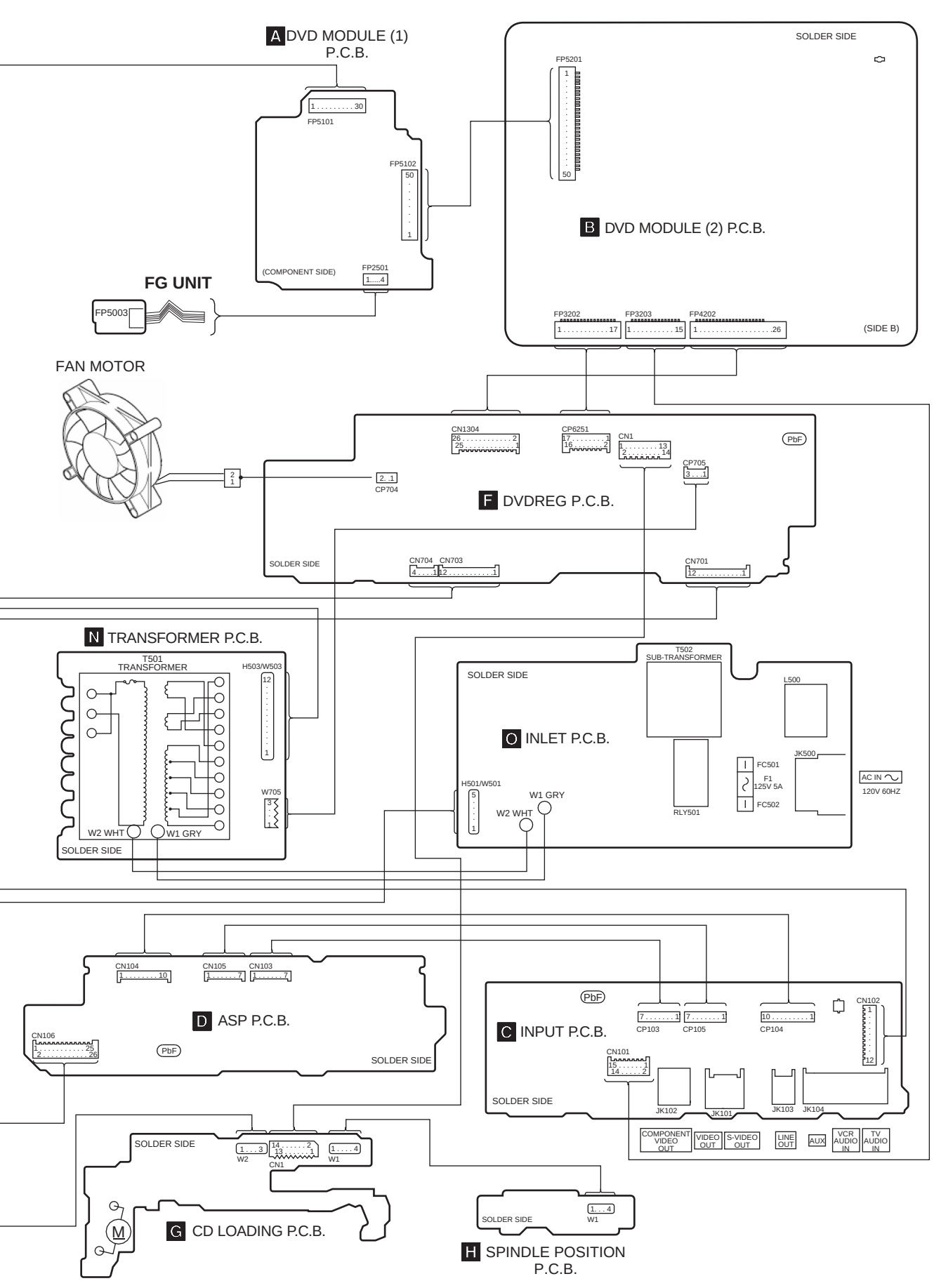
SCHEMATIC DIAGRAM - 24

—— : +B SIGNAL LINE – – : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

M MAIN CIRCUIT




PbF
CN603B
11 10
1 2
K SWITCH P.C.B.
SOLDER SIDE
OPTICAL PICKUP
L HEADPHONE P.C.B.
PbF
CN604
1 13
2 14
W904
JK603
SOLDER SIDE
HEADPHONE
SENSOR
VOLUME
CN603A
1 2
11 10
J PANEL P.C.B.
PbF
CN602
2 14
1 13
CN601
2 22
1 21
SOLDER SIDE
SOLDER SIDE
PbF
CN904
2 1
CN901
22 21
2 1
CN501
1 5
CN503
1 12
14 13
2 1
CN902
SUB WOOFER SPEAKER
CENTER SPEAKER
SURROUND RIGHT SPEAKER
SURROUND LEFT SPEAKER
FRONT RIGHT SPEAKER
FRONT LEFT SPEAKER
JK502
JK501
M MAIN P.C.B.
4 1
12 1
CP704 CP703
CP701
12 1
CP804
12 1
CP802
10 1
CP801
10 1
H505/W505
12 1
CN801
1 10
CN802
1 10
CN804
1 12
Tuner Pack
SOLDER SIDE
E DSP P.C.B.
CN805
14 2
13 1
CN806
1 25
2 26
PbF
11 1
CP251
I CD DETECT P.C.B.
W2
3 1
SOLDER SIDE


A DVD MODULE (1) P.C.B.
FP5101
FP5102
(COMPONENT SIDE)
FP2501
FG UNIT
FP5003
SOLDER SIDE
FP5201
B DVD MODULE (2) P.C.B.
FP3202
FP3203
FP4202
(SIDE B)
FAN MOTOR
CN1304
CP6251
CN1
CP705
PbF
CP704
F DVDREG P.C.B.
SOLDER SIDE
CN704
CN703
CN701
N TRANSFORMER P.C.B.
T501
TRANSFORMER
H503/W503
W705
W2 WHT
W1 GRY
SOLDER SIDE
T502
SUB-TRANSFORMER
L500
O INLET P.C.B.
SOLDER SIDE
H501/W501
W1 GRY
W2 WHT
RLY501
FC501
F1
125V 5A
FC502
JK500
AC IN
120V 60HZ
CN104
CN105
CN103
D ASP P.C.B.
CN106
PbF
SOLDER SIDE
C INPUT P.C.B.
CP103
CP105
CP104
CN102
CN101
JK102
JK101
JK103
JK104
SOLDER SIDE
COMPONENT VIDEO OUT
VIDEO OUT
S-VIDEO OUT
LINE OUT
AUX
VCR AUDIO IN
TV AUDIO IN
SOLDER SIDE
W2
CN1
W1
M
G CD LOADING P.C.B.
SOLDER SIDE
W1
H SPINDLE POSITION P.C.B.

: Power switch

S622

: Disc 1 switch

S623

: Disc 2 switch

S624

: Disc 3 switch

S625

: Disc 4 switch

S626

: Disc 5 switch

S630

: Open/ Close switch

S631

: Stop switch

S632

: Pause switch

S633

: Play switch

S634

: RWD switch

S635

: FWD switch

S636

: Selector switch

S637

: Subwoofer Level switch

S638

: SFC switch

S639

: Disc switch

SW1

: Push switch

SW2

: Push switch

SW3

: OPEN switch

SW4

: CD switch

SW5

: Lock switch

SW 2501

: Leaf switch

VR601

: VR Volume Jog

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveformsdepending upon the internal impedance of the tester or the measuring unit.

(( )) : CD < > : FM

- Importance safety notice :

Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. Whenreplacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

Caution !

IC, LSI and VLSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminium foil.
- Put a conductive mat on the work table.
- Ground the soldering iron.
- Do not touch the pins of IC, LSI or VLSI with fingers directly.

CAUTION: FOR CONTINUED PROTECTION
AGAINST FIRE HAZARD.
REPLACE ONLY WITH SAME
TYPE F1 5A, 125V FUSE.
RISK OF FIRE-REPLACE FUSE AS MARKED.

FUSE CAUTION

These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire harzard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

Ce symbole indique que le fusible utilisé est à rapide. Pour une protection permanente, n' utiliser que des fusibles de même type. Ce dernier est indiqué là qù le présent symbole est apposé.

20. Printed Circuit Board

21. Wiring Connection Diagram

22. Parts Location and Replacement Parts List

Notes:

- Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of these components, be sure to use only manufacturers's specified parts shown in the parts list.

- The parenthesized indications in the Remarks column specify the areas or color. (Refer to the cover page for area or color.)
Parts without these indications can be used for all areas.

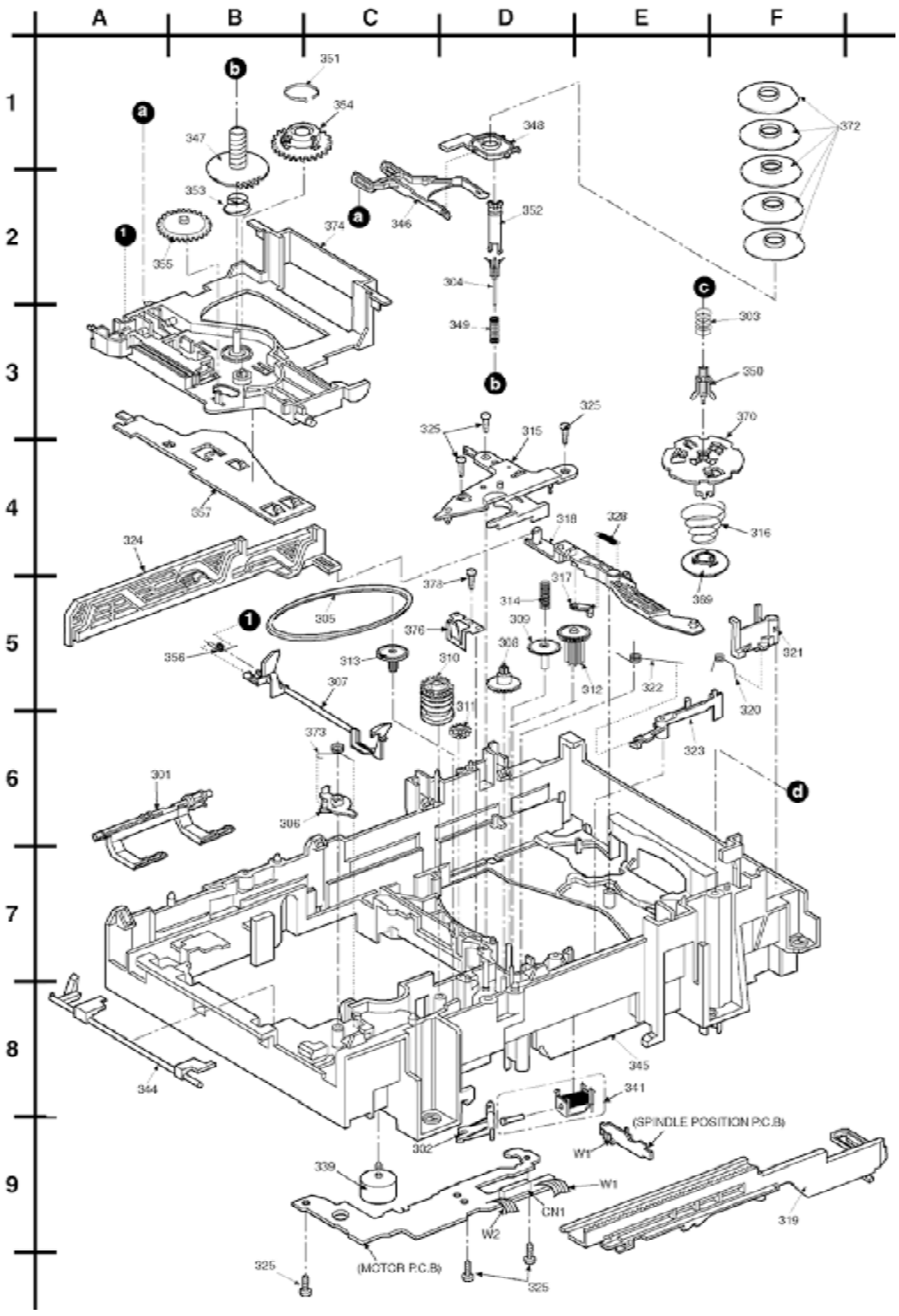
- Warning: This product uses a laser diode. Refer to caution statements on "Precaution of Laser Diode".

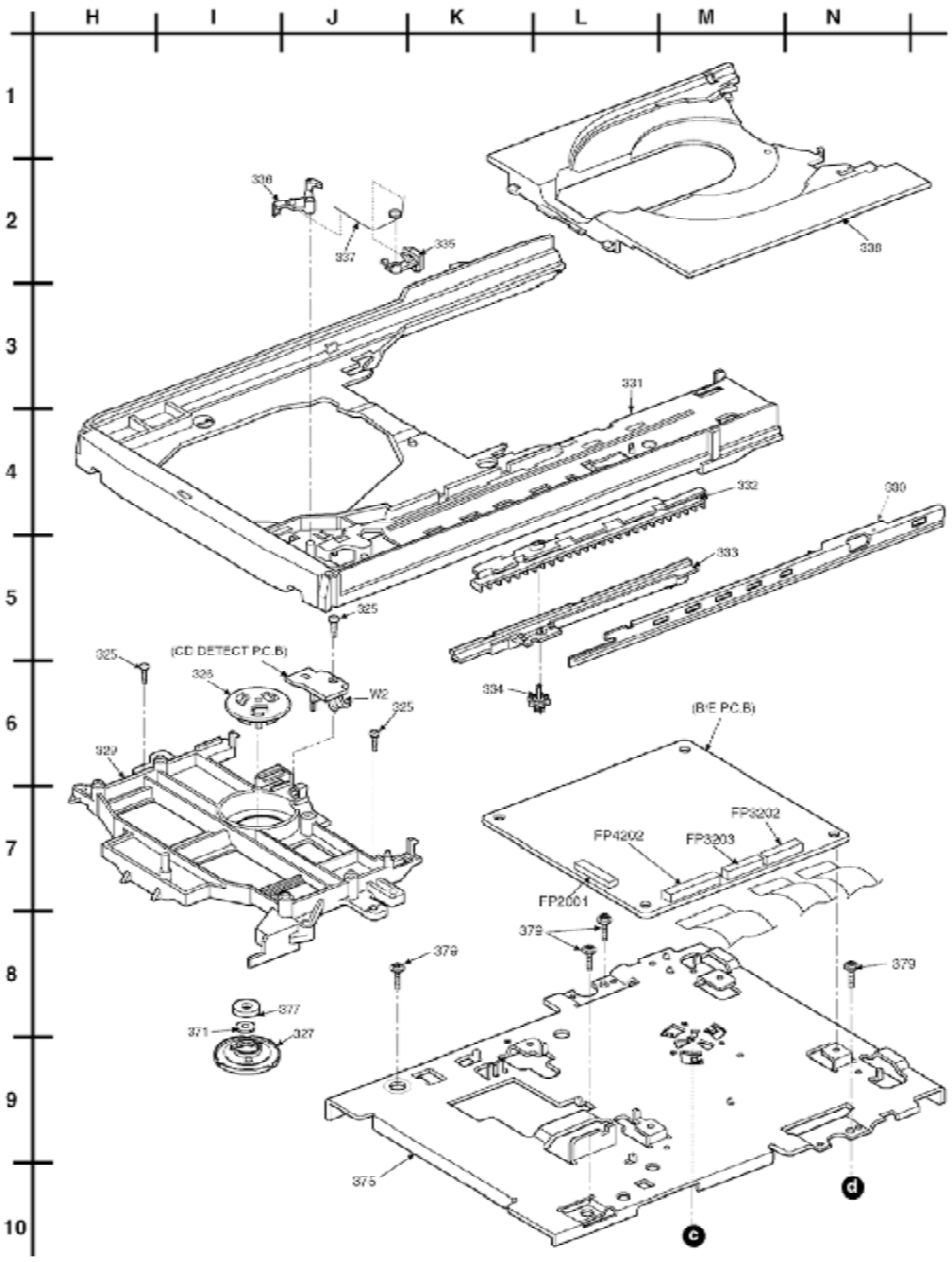
- Capacitor values are in microfarad (μ F) unless specified otherwise, P=Pico-farads(pF); Farads.
- Resistance values are in ohms, unless specified otherwise, 1K= 1,000(ohms).
- The marking (RTL) indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availabilityis dependant on the type of assembly, and in accordance with the laws govening part and product retention. After the end of this period, the assembly will no longer be available.
- [M] indicates in the Remarks columns indicates parts that are supplied by PAVCSG.
- The “(SF)” mark denotes the standard part.
- Reference for O/I book languages are as follows :

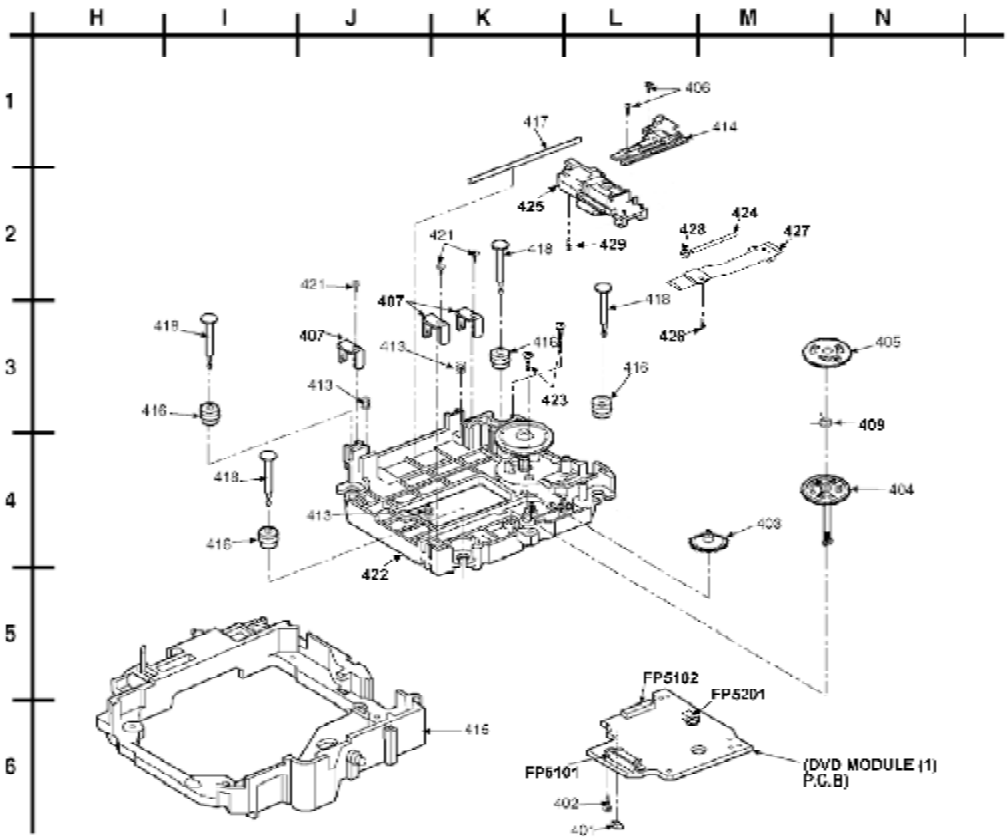
Ar : Arabic	Cf : Canadian French	Cz : Czech	Da : Danish
Du : Dutch	En : English	Fr : French	Ge : German
It : Italian	Ko : Korean	Po : Polish	Ru : Russian
Sp : Spanish	Sw : Swedish	Co : Traditional Chinese	Cn : Simplified Ch

22.1. CD Loading Mechanism

22.1.1. CD Loading Mechanism Parts Location


A
B
C
D
E
F
1
2
3
4
5
6
7
8
9
(SPINDLE POSITION P.C.B)
(MOTOR P.C.B)
CN1
W1
W2


H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
336
337
335
338
331
332
330
333
325
334
325
(CD DETECT P.C.B)
326
W2
325
329
(B/E P.C.B)
FP3202
FP4202
FP3203
FP2001
379
379
379
377
371
327
375
C
D



22.1.2. CD Loading Mechanism Parts List

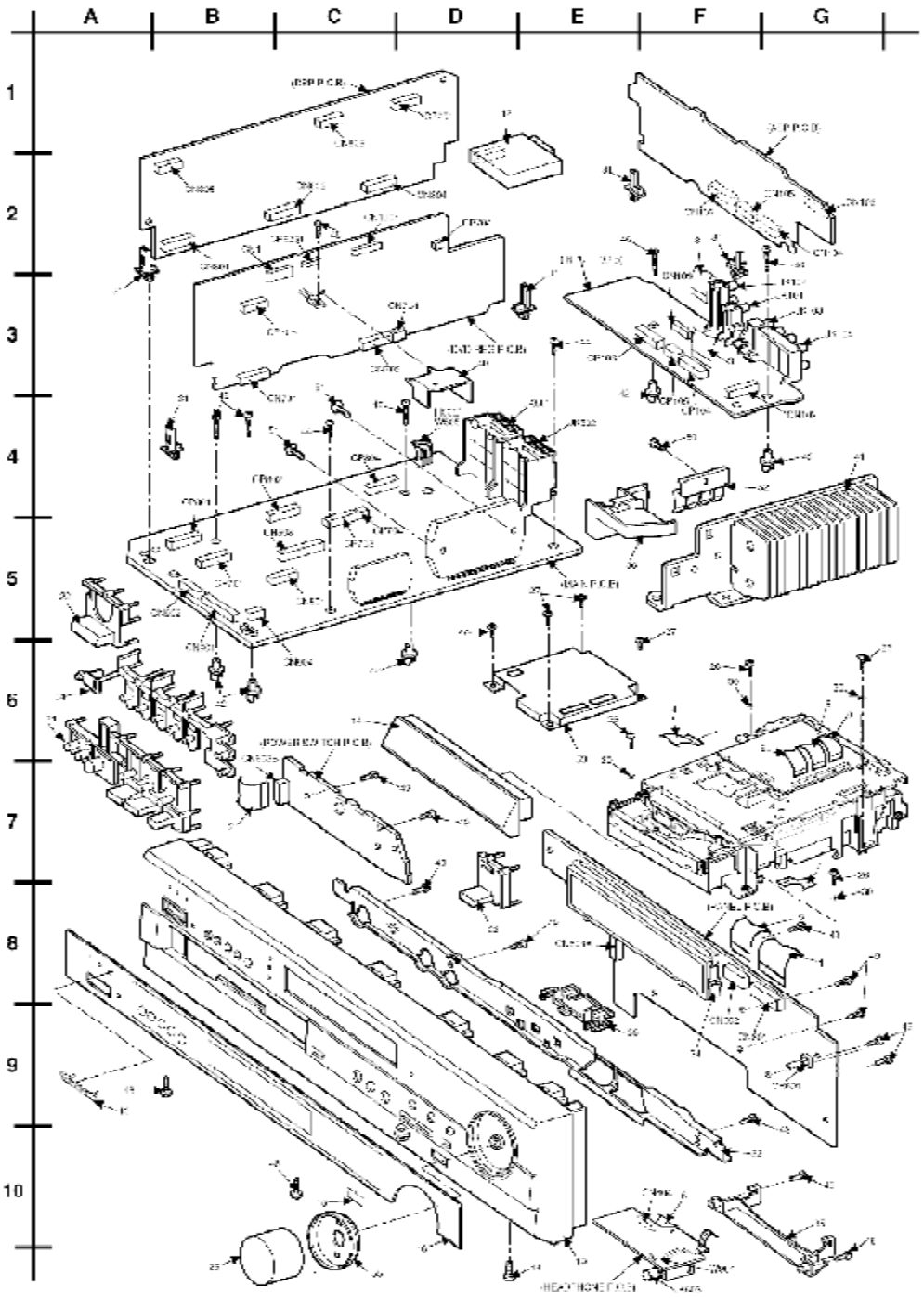
Ref. No.	Part No.	Part Name & Description	Remarks
		TRAVERSE DECK	
301	RML0517	TIMING LEVER	[M]
302	RML0516	PLUNGER LEVER	[M]
303	RMB0551	UPPER SPINDLE SPRING	[M]
304	RMQ0744	LOWER HOOK	[M]
305	RDV0056	BELT	[M]
306	RML0525	FRONT LOCK	[M]
307	RML0526	DISC LEVER	[M]
308	RDG0424	DRIVE GEAR	[M]
309	RDG0425	CHANGE GEAR	[M]
310	RDG0427	TRV CAM GEAR	[M]
311	RDG0428	TRV RELAY GEAR	[M]
312	RDG0426	UP/DOWN GEAR	[M]
313	RDG0429	PULLEY GEAR	[M]
314	RMB0549-1	CHANGR GEAR SPRING	[M]
315	RMQ0748	PITCH PLATE	[M]
316	RMB0553	PUSH SPRING	[M]
317	RML0530	ASSIST LEVER	[M]
318	RML0518	CONNECTION LEVER	[M]
319	RMM0201	SLIDE PLATE 1	[M]
320	RME0258	REAR LOCK SPRING	[M]
321	RML0521	REAR LOCK LEVER	[M]
322	RME0257	TRAY LOCK LEVER SPRI	[M]
323	RML0520	TRAY LOCK	[M]

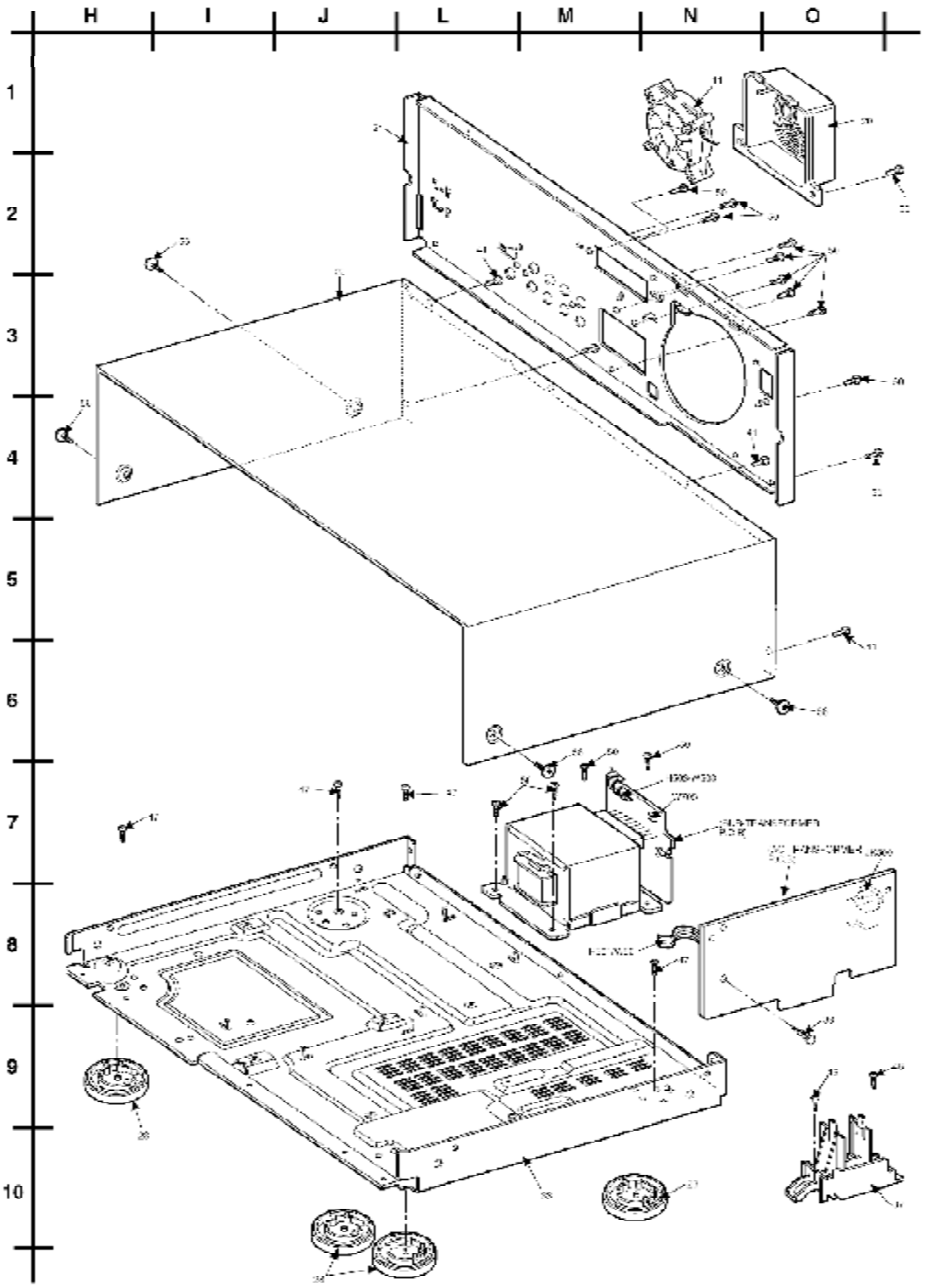
Ref. No.	Part No.	Part Name & Description	Remarks
324	RMM0202	SLIDE PLATE 2	[M]
325	XTB3+10J	SCREW	[M]
326	RMR1367-K	FIXED PLATE	[M]
327	RMR0624-W	CLAMPER	[M]
328	RMB0561	ASSIST LEVER SPRING	[M]
329	RMR1121-K	MECHA COVER	[M]
330	RMA1110-2	TRAY ANGLE	[M]
331	RMR1122-H1	TRAYBASE	[M]
332	RMM0204	CARRIER	[M]
333	RMM0203	DRIVE RACK	[M]
334	RDG0432	SPEED UP GEAR	[M]
335	RML0524	SLIDE LOCK	[M]
336	RML0523	CARRIER LOCK	[M]
337	RME0260-1	SLIDE LOCK SPRING	[M]
338	RMR1123-H	TRAY	[M]
339	RXQ0595	MOTOR ASS'Y	[M]
341	RSJ0003	SOLENOLD ASS'Y	[M]
344	RML0519	8CD LEVER	[M]
345	RFKNAAK27GCS	MECHA BASE ASS'Y	[M]
346	RML0522	TURNING STOPPER	[M]
347	RMQ0745	LOWER SPINDLE	[M]
348	RMQ0746	UP/DOWN BASE	[M]
349	RMB0550	LOWER SPINDLE SPRING	[M]
350	RMQ0747	UPPER HOOK	[M]
351	RME0263	CLICK SPRING	[M]
352	RMQ0743	SPINDLE SHAFT	[M]
353	RMB0552	CUSHION SPRING	[M]
354	RDG0430	RELAY GEAR A	[M]
355	RDG0431	RELAY GEAR B	[M]
356	RME0262	DISK LEVER SPRING	[M]
357	RMA1105	SUPPORT PLATE	[M]
369	RMX0141	PUSH SPACER	[M]
370	RMQ0749	UPPER SPINDLE	[M]
371	RHM0001	MAGNET	[M]
372	RMX0140	DISC SPACER	[M]
373	RME0261	FRONT LOCK SPRING	[M]
374	RMQ0742	SPINDLE BASE	[M]
375	RMA1435	PB ANGLE	[M]
376	RMC0387	SUPPORT SPRING	[M]
377	RMA1003	BACK YOKE	[M]
378	XTV2+6G	PCB SCREW	[M]
379	XTW3+10T	SCREW	[M]
401	RMG0558-K	P.C.B. RUBBER	[M]
402	RHD20060	PCB SCREW	[M]
403	RDG0499	TRAVERSE GEAR A	[M]
404	RDG0500	TRAVERSE GEAR B	[M]
405	RDG0501	TRAVERSE GEAR C	[M]
406	RHD17044	DRIVE RACK SCREW	[M]
407	RMC0415	ADJUST SPRING HOLDER	[M]
409	RME0319	TRAVERSE GEAR SPRING	[M]
413	RME0320	ADJUSTMENT SPRING	[M]
414	RMM0234-1	TRAVERSE DRIVE RACK	[M]
415	RMR1366-K1	UNIT CHASSIS	[M]
416	RMG0545-A	FLOATING RUBBER	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
417	RMS0711	GUIDE SHAFT	[M]
418	RMS0712-1	FIXED PIN	[M]
421	VHD1224	ADJ SPRING HOLDER SC	[M]
422	RXQ0749B	SPINDLE MOTOR ASS'Y	[SPC]
423	XQN17+C28	MOTOR SCREW	[M]
424	RMS0710	DRIVE SHAFT	[M]
425	RD-DDP013AS	OPU UNIT	[M]
426	RHD14095	FPC SCREW	[M]
427	RJB2308A-1	INTERFACE FPC	[M]
428	RMG0561-T	CUSHION RUBBER	[M]
429	RHD17029	SHAFT ADJUST SCREW	[M]

22.2. Cabinet

22.2.1. Cabinet Parts Location


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
10



22.2.2. Cabinet Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	REE1019	22P FFC	[M]
2	REE1020	11P FFC	[M]
3	REE1025	26P FFC (LONG)	[M]
4	REEX0292	50P FFC WIRE	[M]
5	REE1088	14P FFC	[M]
6	REE1089	14P FFC	[M]
7	REE1090	14P FFC WIRE	[M]
8	REEX0296	15P FFC WIRE	[M]
9	REE1092	17P FFC	[M]
10	REE1093	26P FFC	[M]
11	REM0072-3	FAN	[M]
12	ENG06502Q	TUNER PACK	[M]
13	RGB0036-1S	PANASONIC BADGE	[M]
14	RGK1426C-S	DVD LID	[M]
15	RGKX0231-Q	SENSOR PANEL	[M]
16	RGKX0219-S	PANEL ORNAMENT	[M]
19	RGPX0125-S	FRONT PANEL	[M]
20	RGQ0277-H	FAN COVER	[M]
21	RGR0304H-CC	REAR PANEL	[M]
22	RGU2022-S	POWER BUTTON	[M]
23	RGU2023-S	OPEN/CLOSE BUTTON	[M]
24	RGUX0540-S	OPERATION BUTTON	[M]
25	RGW0390A-S	VOLUME KNOB	[M]
26	RHD30075	SCREW	[M]
27	RHD30078	SCREW	[M]
28	RKA0079-A	FOOT	[M]
29	RKM0425-S	TOP CABINET (BEND)	[M]
30	RMG0402-K	RUBBER WASHER	[M]
31	RMN0203	PCB HOLDER	[M]
32	RMA1502	SUPPORT ANGLE	[M]
33	RMK0461B-1	BOTTOM CHASSIS	[M]
34	RMN0603-2	FL HOLDER	[M]
35	RMN0604	MIC JACK HOLDER	[M]
36	RMN0606	WIRE SUPPORT	[M]
37	RMN0638-1	SUB TRANS SUPPORT	[M]
38	RMN0669	SUPPORT PIECE	[M]
39	RMN0702	PCB SPACER	[M]
40	RMY0241	SUB HEAT SINK	[M]
41	RXX0225	HEAT SINK UNIT	[M]
42	SHE187-6J	PCB SUPPORT	[M]
44	XTB3+10J	SCREW	[M]
45	XTB3+10JFZ	SCREW	[M]
46	XTB3+20J	SCREW	[M]
47	XTB3+6J	SCREW	[M]
48	XTB3+8JFZ	SCREW	[M]
49	XTBS26+10J	SCREW	[M]
50	XTBS3+8JFZ1	SCREW	[M]
51	XTW3+15T	SCREW	[M]
52	RMC0412	REGULATOR CLUMPER	[M]
53	RSCX0081	B/E SHIELD PLATE	[M]
54	RGLX0071-Q	5 DISC BUTTON	[M]
55	RGKX0218-S	VOLUME RING	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
56	SNE2129-4	SCREW	[M]

22.3. Component Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		P.C.B	
	REP3406B-N	DVD MODULE (1) (COMPONENT SIDE & FOIL SIDE) P.C.B.	[M] RTL
	REPX0393A	DVD MODULE (2) (SIDE A & SIDE B) P.C.B.	[M] RTL
	REPX0391A	INPUT P.C.B. / ASP P.C.B. / DSP P.C.B. / DVDREG P.C.B.	[M] RTL
	REP2578A-N	CD LOADING P.C.B. / CD DETECT P.C.B. / SPINDLE POSITION P.C.B.	[M] RTL
	REPX0392A	PANEL P.C.B. / HEADPHONE P.C.B. / SWITCH P.C.B.	[M] RTL
	REPX0394B	MAIN P.C.B. / INLET P.C.B. / TRANSFORMER P.C.B.	[M] RTL
	REP3383A	FG UNIT	[M] RTL
		INTEGRATED CIRCUITS	
IC1	C0GAM0000005	IC MOTOR DRIVE	[M]
IC101	C9ZB00000377	IC VIDEO BUFFER	[M]
IC103	C0ABCB000052	IC QUAD OP AMP	[M]
IC104	KIA4558FEL	IC DUAL OP-AMP	[M]
IC106	C1BB00000386	IC DPL SURROUND DECODER	[M]
IC108	C0JBAR000292	IC TRIPLE 2CH ANALOG MULTIPLEXOR	[M]
IC252	C0ABCB000052	IC QUAD OP AMP	[M]
IC253	KIA4558FEL	IC DUAL OP-AMP	[M]
IC401	C0AABB000117	IC OP-AMP (HP AMP)	[M]
IC402	C0ABCB000052	IC QUAD OP AMP	[M]
IC451	C2BBFD000307	IC MECHA CONTROL	[M]
IC501	RSN311W64B-P	IC HIC	[M]
IC502	STK470-050A	IC HIC	[M]
IC601	C2BBGF000463	IC SYSTEM CONTROL	[M]
IC702	C0DBAJG00002	IC VOLTAGE REGULATOR	[M]
IC703	C0CAADG00019	IC VOLTAGE REGULATOR	[M]
IC740	C0DBAJG00002	IC VOLTAGE REGULATOR	[M]
IC801	C2HBZC000013	IC DIGITAL SIGNAL PROCESSOR	[M]
IC802	C0JZAS000004	IC ANALOG SWITCH	[M]
IC803	C0ABCB000052	IC QUAD OP AMP	[M]
IC805	C2BBFD000344	IC DSP MECHA CONTROL	[M]
IC2501	C0GBG0000033	IC MOTOR DRIVE	[M]
IC3001	MN2DS0002AP1	IC AV DECODER	[M]
IC3051	C3ABPG000063	IC 64 SDRAM	[M]
IC3061	C3ABPG000063	IC 64 SDRAM	[M]
IC4211	C0FBBK000036	IC AUDIO DAC	[M]
IC6201	C0EBE0000070	IC RESET	[M]
IC6251	C0CBCBE00003	IC POWER SUPPLY	[M]
IC6261	C0JBAA000001	IC INVERTER	[M]
IC6262	C0JBAA000001	IC INVERTER	[M]
IC6301	RFKFMD70M160	IC 16M FLASH ROM	[SPC]
IC6311	C0JBAZ001251	IC LATCH	[M]
IC6312	C0JBAZ001251	IC LATCH	[M]
IC6561	C1DB00000980	IC CLOCK GENERATOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
		TRANSISTORS	
Q1	B1GACFGG0004	TRANSISTOR	[M]
Q120	UNR221200L	TRANSISTOR	[M]
Q130	B1AAGC000007	TRANSISTOR	[M]
Q131	B1AAGC000007	TRANSISTOR	[M]
Q132	KRA111MTA	TRANSISTOR	[M]
Q133	B1AAGC000007	TRANSISTOR	[M]
Q135	B1AAJC000007	TRANSISTOR	[M]
Q136	B1AAJC000007	TRANSISTOR	[M]
Q137	KRA111MTA	TRANSISTOR	[M]
Q138	UNR221200L	TRANSISTOR	[M]
Q139	B1GDCFEM0002	TRANSISTOR	[M]
Q142	B1AAGC000007	TRANSISTOR	[M]
Q143	B1AAGC000007	TRANSISTOR	[M]
Q251	B1GFGCAA0001	TRANSISTOR	[M]
Q252	B1GFGCAA0001	TRANSISTOR	[M]
Q253	B1GFGCAA0001	TRANSISTOR	[M]
Q254	B1GBCFJN0004	TRANSISTOR	[M]
Q255	B1GDCFJJ0002	TRANSISTOR	[M]
Q256	B1GBCFJN0004	TRANSISTOR	[M]
Q401	B1AAGC000007	TRANSISTOR	[M]
Q402	B1AAGC000007	TRANSISTOR	[M]
Q403	B1AAGC000007	TRANSISTOR	[M]
Q404	KRA111MTA	TRANSISTOR	[M]
Q405	KRA111MTA	TRANSISTOR	[M]
Q406	KRA111MTA	TRANSISTOR	[M]
Q407	KTC3199GRTA	TRANSISTOR	[M]
Q408	B1AAGC000007	TRANSISTOR	[M]
Q409	KRA111MTA	TRANSISTOR	[M]
Q410	KTC3199GRTA	TRANSISTOR	[M]
Q451	2SB0621ARA	TRANSISTOR	[M]
Q452	B1GBCFJN0004	TRANSISTOR	[M]
Q501	KTC3199GRTA	TRANSISTOR	[M]
Q502	KTC3199GRTA	TRANSISTOR	[M]
Q503	KTC3199GRTA	TRANSISTOR	[M]
Q504	KRA102MTA	TRANSISTOR	[M]
Q505	KTC3199GRTA	TRANSISTOR	[M]
Q531	KTC3199GRTA	TRANSISTOR	[M]
Q541	2SB621ARSTA	TRANSISTOR	[M]
Q551	B1ACCF000037	TRANSISTOR	[M]
Q552	KRC111MTA	TRANSISTOR	[M]
Q553	KTC3199GRTA	TRANSISTOR	[M]
Q554	2SB0621ARA	TRANSISTOR	[M]
Q555	KTC3199GRTA	TRANSISTOR	[M]
Q556	KTC3199GRTA	TRANSISTOR	[M]
Q557	B1ACCF000037	TRANSISTOR	[M]
Q558	KTC3199GRTA	TRANSISTOR	[M]
Q592	2SC3940ARA	TRANSISTOR	[M]
Q594	KRC102MTA	TRANSISTOR	[M]
Q601	B1GACFLL0005	TRANSISTOR	[M]
Q605	B1GBCFJN0004	TRANSISTOR	[M]
Q608	B1GBCFJN0004	TRANSISTOR	[M]
Q609	B1GBCFJN0004	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q610	B1GBCFJN0004	TRANSISTOR	[M]
Q611	B1GBCFJN0004	TRANSISTOR	[M]
Q612	B1GBCFJN0004	TRANSISTOR	[M]
Q701	B1GDCFJJ0002	TRANSISTOR	[M]
Q702	B1GBCFJN0004	TRANSISTOR	[M]
Q703	KTA1046	TRANSISTOR	[M]
Q704	B1ABCF000011	TRANSISTOR	[M]
Q705	B1ADCF000001	TRANSISTOR	[M]
Q710	2SB621ARSTA	TRANSISTOR	[M]
Q711	B1ABCF000011	TRANSISTOR	[M]
Q712	2SB621ARSTA	TRANSISTOR	[M]
Q713	B1ABCF000011	TRANSISTOR	[M]
Q805	B1GDCFJJ0002	TRANSISTOR	[M]
Q806	2SB14170QA	TRANSISTOR	[M]
Q807	B1ABCF000011	TRANSISTOR	[M]
Q808	2SB621ARSTA	TRANSISTOR	[M]
Q809	B1ABCF000011	TRANSISTOR	[M]
Q810	B1GFGCAA0001	TRANSISTOR	[M]
Q5111	B1BDBF000004	TRANSISTOR	[M]
Q5115	B1BDBF000004	TRANSISTOR	[M]
Q5211	UNR212100L	TRANSISTOR	[M]
Q5221	2SD1819A0L	TRANSISTOR	[M]
Q5225	2SD1819A0L	TRANSISTOR	[M]
QR2045	UNR511M00L	CHIP TRANSISTOR	[M]
		DIODES	
D1	GP1S94	DIODE	[M]
D2	B0BA4R600003	DIODE	[M]
D102	B0BC5R000009	DIODE	[M]
D103	B0BC5R000009	DIODE	[M]
D104	B0ACCK000005	DIODE	[M]
D105	B0ACCK000005	DIODE	[M]
D251	B0ACCK000005	DIODE	[M]
D252	B0ACCK000005	DIODE	[M]
D401	B0BA5R000004	DIODE	[M]
D451	B0ACCK000005	DIODE	[M]
D455	RL1N4003N02	DIODE	[M]
D456	B0ACCK000005	DIODE	[M]
D500	B0AACK000004	DIODE	[M]
D501	RK306LFU1	DIODE	[M]
D502	RK306LFU1	DIODE	[M]
D503	B0AACK000004	DIODE	[M]
D504	B0AACK000004	DIODE	[M]
D505	B0AACK000004	DIODE	[M]
D506	B0AACK000004	DIODE	[M]
D507	B0AACK000004	DIODE	[M]
D520	B0AACK000004	DIODE	[M]
D521	B0EAMM000038	DIODE	[M]
D522	B0EAMM000038	DIODE	[M]
D523	B0EAMM000038	DIODE	[M]
D524	B0EAMM000038	DIODE	[M]
D525	B0EAMM000038	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D526	B0EAMM000038	DIODE	[M]
D527	B0EAKM000085	DIODE	[M]
D528	B0EAKM000085	DIODE	[M]
D531	B0EAKM000085	DIODE	[M]
D532	B0EAKM000085	DIODE	[M]
D533	B0EAKM000085	DIODE	[M]
D534	B0EAKM000085	DIODE	[M]
D535	B0EAKM000085	DIODE	[M]
D536	B0EAKM000085	DIODE	[M]
D539	B0BA8R700009	DIODE	[M]
D541	B0EAKM000085	DIODE	[M]
D542	B0EAKM000085	DIODE	[M]
D543	B0EAKM000085	DIODE	[M]
D544	B0EAKM000085	DIODE	[M]
D545	B0EAKM000085	DIODE	[M]
D546	B0EAKM000085	DIODE	[M]
D547	B0BA02600018	DIODE	[M]
D551	B0AACK000004	DIODE	[M]
D552	B0AACK000004	DIODE	[M]
D553	B0AACK000004	DIODE	[M]
D556	MA2C700A0F	DIODE	[M]
D557	MA2C700A0F	DIODE	[M]
D591	B0EAKM000085	DIODE	[M]
D592	B0EAKM000085	DIODE	[M]
D595	B0BA6R800007	DIODE	[M]
D601	B0ACCK000005	DIODE	[M]
D602	1SS380TE-17	DIODE	[M]
D603	1SS380TE-17	DIODE	[M]
D604	1SS380TE-17	DIODE	[M]
D607	MA2J72900L	DIODE	[M]
D608	B0BC5R600003	DIODE	[M]
D609	B0ACCK000005	DIODE	[M]
D612	B3ADA0000087	DIODE	[M]
D613	SLR325VCT31	DIODE	[M]
D614	B3ACA0000220	DIODE	[M]
D615	B3ACA0000220	DIODE	[M]
D616	B3ACA0000220	DIODE	[M]
D617	B3ACA0000220	DIODE	[M]
D618	B3ACA0000220	DIODE	[M]
D664	B0ACCK000005	DIODE	[M]
D665	B0ACCK000005	DIODE	[M]
D668	B0ACCK000005	DIODE	[M]
D701	RL1N4003N02	DIODE	[M]
D702	RL1N4003N02	DIODE	[M]
D703	RL1N4003N02	DIODE	[M]
D704	RL1N4003N02	DIODE	[M]
D705	B0ADCC000002	DIODE	[M]
D706	B0BC5R000009	DIODE	[M]
D707	B0BC9R000008	DIODE	[M]
D708	B0ACCK000005	DIODE	[M]
D709	SFPB-72V	DIODE	[M]
D710	B0BC7R500001	DIODE	[M]
D712	B0ADCC000002	DIODE	[M]
D713	B0ADCC000002	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D714	B0ACCK000005	DIODE	[M]
D715	B0ACCK000005	DIODE	[M]
D740	SFPB-72V	DIODE	[M]
D741	B0BC7R500001	DIODE	[M]
D801	RL1N4003N02	DIODE	[M]
D802	RL1N4003N02	DIODE	[M]
D803	B0ADCC000002	DIODE	[M]
D804	B0ADCC000002	DIODE	[M]
D805	B0BC5R000009	DIODE	[M]
D5151	MA2J72800L	DIODE	[M]
LB3001	J0JHC0000045	CHIP INDUCTOR	[M]
LB3002	J0JHC0000045	CHIP INDUCTOR	[M]
LB3201	D0GB101JA002	100 1/16W	[M]
LB3202	D0GB101JA002	100 1/16W	[M]
LB3203	D0GB101JA002	100 1/16W	[M]
LB3204	J0JCC0000119	CHIP INDUCTOR	[M]
LB3205	J0JCC0000119	CHIP INDUCTOR	[M]
LB3206	J0JCC0000119	CHIP INDUCTOR	[M]
LB3207	J0JCC0000119	CHIP INDUCTOR	[M]
LB3208	J0JCC0000119	CHIP INDUCTOR	[M]
LB4200	J0JBC0000015	CHIP INDUCTOR	[M]
LB4201	J0JCC0000119	CHIP INDUCTOR	[M]
LB4207	J0JCC0000119	CHIP INDUCTOR	[M]
LB4208	J0JCC0000119	CHIP INDUCTOR	[M]
LB4209	J0JCC0000119	CHIP INDUCTOR	[M]
LB4210	J0JCC0000119	CHIP INDUCTOR	[M]
LB4211	J0JCC0000119	CHIP INDUCTOR	[M]
LB4212	J0JCC0000119	CHIP INDUCTOR	[M]
LB4214	J0JCC0000119	CHIP INDUCTOR	[M]
LB4215	J0JCC0000119	CHIP INDUCTOR	[M]
LB4216	J0JBC0000015	CHIP INDUCTOR	[M]
LB4217	J0JBC0000015	CHIP INDUCTOR	[M]
LB4218	ERJ3GEY0R00V	0 1/16W	[M]
LB5101	J0JHC0000045	CHIP INDUCTOR	[M]
LB5105	J0JBC0000015	CHIP INDUCTOR	[M]
LB5106	J0JBC0000015	CHIP INDUCTOR	[M]
LB5201	J0JBC0000015	CHIP INDUCTOR	[M]
LB5204	J0JCC0000119	CHIP INDUCTOR	[M]
LB5205	J0JCC0000119	CHIP INDUCTOR	[M]
LB5206	J0JBC0000015	CHIP INDUCTOR	[M]
LB5207	J0JCC0000119	CHIP INDUCTOR	[M]
LB5208	J0JBC0000015	CHIP INDUCTOR	[M]
LB5209	J0JBC0000015	CHIP INDUCTOR	[M]
LB5210	J0JCC0000119	CHIP INDUCTOR	[M]
LB5211	J0JCC0000119	CHIP INDUCTOR	[M]
LB5212	J0JCC0000119	CHIP INDUCTOR	[M]
LB5213	J0JCC0000119	CHIP INDUCTOR	[M]
LB5214	J0JHC0000045	CHIP INDUCTOR	[M]
LB5215	J0JCC0000119	CHIP INDUCTOR	[M]
LB5217	J0JCC0000119	CHIP INDUCTOR	[M]
LB5219	J0JCC0000119	CHIP INDUCTOR	[M]
LB5220	J0JBC0000015	CHIP INDUCTOR	[M]
LB5222	ERJ3GEY0R00V	0 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
LB5228	J0JBC0000015	CHIP INDUCTOR	[M]
LB5229	J0JBC0000015	CHIP INDUCTOR	[M]
LB5231	J0JHC0000045	CHIP INDUCTOR	[M]
LB5233	J0JHC0000045	CHIP INDUCTOR	[M]
LB5234	J0JBC0000015	CHIP INDUCTOR	[M]
LB5235	J0JBC0000015	CHIP INDUCTOR	[M]
LB6261	J0JBC0000015	CHIP INDUCTOR	[M]
LB6301	J0JHC0000045	CHIP INDUCTOR	[M]
LB6561	J0JBC0000015	CHIP INDUCTOR	[M]
LB6562	J0JCC0000167	CHIP INDUCTOR	[M]
LB6564	J0JCC0000077	CHIP BEEZ	[M]
LB6566	J0JBC0000015	CHIP INDUCTOR	[M]
LB6567	J0JCC0000119	CHIP INDUCTOR	[M]
		VARIABLE RESISTORS	
VR601	EVEKE2F3024M	VOLUME JOG	[M]
		SWITCHES	
S621	EVQ11G05R	POWER SWITCH	[M]
S622	EVQ11G05R	DISC 1 SWITCH	[M]
S623	EVQ11G05R	DISC 2 SWITCH	[M]
S624	EVQ11G05R	DISC 3 SWITCH	[M]
S625	EVQ11G05R	DISC 4 SWITCH	[M]
S626	EVQ11G05R	DISC 5 SWITCH	[M]
S630	EVQ11G05R	OPEN/CLOSE SWITCH	[M]
S631	EVQ11G05R	STOP SWITCH	[M]
S632	EVQ11G05R	PAUSE SWITCH	[M]
S633	EVQ11G05R	PLAY SWITCH	[M]
S634	EVQ11G05R	RWD SWITCH	[M]
S635	EVQ11G05R	FWD SWITCH	[M]
S636	EVQ11G05R	SELECTOR SWITCH	[M]
S637	EVQ11G05R	SUBWOOFER LEVEL SWITCH	[M]
S638	EVQ11G05R	SFC SWITCH	[M]
S639	EVQ11G05R	DISC SWITCH	[M]
SW1	RSH1A032-U	PUSH SWITCH	[M]
SW2	RSH1A032-U	PUSH SWITCH	[M]
SW3	RSH1A005-1U	OPEN SWITCH	[M]
SW4	RSH1A91ZA-A	CD SWITCH	[M]
SW5	K0L1BB000005	LOCK SWITCH	[M]
SW2501	RSH1A048-A	LEAF SWITCH	[M]
		CONNECTORS	
CN1	K1MN14A00049	14P FFC CONNECTOR	[M]
CN1	K1MN14B00058	14P CONNECTOR	[M]
CN101	K1MN15A00049	15P CONNECTOR	[M]
CN102	RJS1A5212	12P CONNECTOR	[M]
CN103	RJU057G07	7P CONNECTOR	[M]
CN104	K1KB10B00041	10P CONNECTOR	[M]
CN105	RJU057G07	7P CONNECTOR	[M]
CN106	K1MN26B00045	CONNECTOR	[M]
CN501	K1KA05A00084	CONNECTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
CN503	K1KA12A00066	CONNECTOR	[M]
CN601	RJS1A6222-1	22P FFC CONNECTOR	[M]
CN602	RJS1A6214-1	14P FFC CONNECTOR	[M]
CN603A	RJS1A6211-1	11P FFC CONNECTOR	[M]
CN603B	RJS1A9411	11P FFC CONNECTOR	[M]
CN604	K1MN14A00049	14P FFC CONNECTOR	[M]
CN701	K1KB12B00036	12P CONNECTOR	[M]
CN703	K1KB12B00036	12P CONNECTOR	[M]
CN704	RJU057W004	4P CONNECTOR	[M]
CN801	K1KB10B00041	10P CONNECTOR	[M]
CN802	K1KB10B00041	10P CONNECTOR	[M]
CN804	K1KB12B00036	12P CONNECTOR	[M]
CN805	K1MN14B00058	14P CONNECTOR	[M]
CN806	K1MN26B00045	CONNECTOR	[M]
CN901	K1MN22A00010	22 FFC CONNECTOR	[M]
CN902	K1MN14A00049	14P FFC CONNECTOR	[M]
CN904	RJT029W02V-1	SP CONNECTOR	[M]
CN1304	K1MN26B00045	CONNECTOR	[M]
CP103	RJT057G07	7P CONNECTOR	[M]
CP104	K1KA10A00257	10P CONNECTOR	[M]
CP105	RJT057G07	7P CONNECTOR	[M]
CP251	K1KA11A00093	11P CONNECTOR	[M]
CP701	K1KA12A00184	12P CONNECTOR	[M]
CP703	K1KA12A00184	12P CONNECTOR	[M]
CP704	K1KA02A00008	CONNECTOR	[M]
CP704	K1KA04A00205	4P CONNECTOR	[M]
CP705	RJT029W03VT	CONNECTOR	[M]
CP801	K1KA10A00257	10P CONNECTOR	[M]
CP802	K1KA10A00257	10P CONNECTOR	[M]
CP804	K1KA12A00184	12P CONNECTOR	[M]
CP6251	K1MN17B00037	FFC CONNECTOR	[M]
		COILS & TRANSFORMERS	
L101	ELJFCR39KF	CHIP INDUCTOR	[M]
L102	J0JCC0000120	CHIP INDUCTOR	[M]
L103	J0JCC0000120	CHIP INDUCTOR	[M]
L104	J0JCC0000120	CHIP INDUCTOR	[M]
L105	J0JCC0000120	CHIP INDUCTOR	[M]
L106	J0JCC0000120	CHIP INDUCTOR	[M]
L107	J0JCC0000120	CHIP INDUCTOR	[M]
L108	ELJFCR68JF	CHIP INDUCTOR	[M]
L111	ELESN220JA	COIL	[M]
L451	RLQB101KT-1Y	COIL	[M]
L452	G0C100JA0030	INDUCTOR	[M]
L500	RLQZ371	LINE FILTER	[M] ⚠
L601	J0JBC0000041	CHIP INDUCTOR	[M]
L602	J0JBC0000041	CHIP INDUCTOR	[M]
L701	G0A200D00002	COIL	[M]
L702	G0A101G00022	COIL	[M]
L703	G0A200D00002	COIL	[M]
L704	G0A200D00002	COIL	[M]
L705	G0A200D00002	COIL	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
L740	G0A200D00002	COIL	[M]
L741	G0A101G00022	COIL	[M]
L801	J0JBC0000041	CHIP INDUCTOR	[M]
L802	G0C100JA0030	INDUCTOR	[M]
L803	G0C100JA0030	INDUCTOR	[M]
L804	J0JBC0000041	CHIP INDUCTOR	[M]
L805	J0JBC0000041	CHIP INDUCTOR	[M]
L806	G0C100JA0030	INDUCTOR	[M]
L905	J0JBC0000019	CHIP INDUCTOR	[M]
L906	J0JBC0000019	CHIP INDUCTOR	[M]
L907	J0JBC0000019	CHIP INDUCTOR	[M]
L908	J0JBC0000019	CHIP INDUCTOR	[M]
L909	J0JBC0000019	CHIP INDUCTOR	[M]
L910	J0JBC0000019	CHIP INDUCTOR	[M]
L2001	G1C100K00020	CHIP INDUCTOR	[M]
L2002	G1C100K00020	CHIP INDUCTOR	[M]
L3101	G1C100K00020	CHIP INDUCTOR	[M]
L4211	G1C220KA0038	CHIP CAPACITOR	[M]
L5101	ELJEA100KF	CHIP INDUCTOR	[M]
L5221	G1C100K00020	CHIP INDUCTOR	[M]
L6561	G1C220KA0038	CHIP CAPACITOR	[M]
L6562	G1C220KA0038	CHIP CAPACITOR	[M]
T501	RTP2N3C010	AC TRANSFORMER	[M] ⚠
T502	RTP1H3E002	BACK UP TRANSFORMER	[M] ⚠
		COMPONENT COMBINATION	
Z501	ERZV10V511CS	ZENER	[M] ⚠
Z601	B3RAB0000013	REMOTE RECEIVER	[M]
		RELAY	
RLY501	RSY0040M-0	PRIMARY RELAY	[M] ⚠
		OSCILLATORS	
X451	RSXY8M00D01T	CERAMIC RESONATOR	[M]
X602	H2B400400013	OSCILLATOR	[M]
X801	RSXZ36M8M01T	36.86 MHZ RESONATOR	[M]
X802	RSXY8M00D01T	CERAMIC RESONATOR	[M]
X6501	H0J368600003	CRYSTAL OSCILLATOR	[M]
		DISPLAY TUBE	
FL601	A2BD00000072	FL DISPLAY	[M]
FL4201	F1H0J1050018	1 6.3V	[M]
FL6251	F1J1E1040022	0.1 25V	[M]
FL6252	F1H0J1050018	1 6.3V	[M]
FL6253	F1H0J1050018	1 6.3V	[M]
FL6254	F1H0J1050018	1 6.3V	[M]
		FUSES	

Ref. No.	Part No.	Part Name & Description	Remarks
F1	XBA1C50NBAL	FUSE	[M] ⚠
		FUSE HOLDERS	
FC501	EYF52BC	FUSE HOLDER	[M]
FC502	EYF52BC	FUSE HOLDER	[M]
		FUSE PROTECTOR	
FP549	RSFMB05KT-L	FUSE PROTECTOR	[M] ⚠
FP591	K5G402AA0002	FUSE PROTECTOR	[M] ⚠
FP702	K5G402AA0002	FUSE PROTECTOR	[M] ⚠
FP2501	K1MN04B00036	CONNECTOR	[M]
FP3202	K1MN17B00041	CONNECTOR	[M]
FP3203	K1MN15B00037	CONNECTOR	[M]
FP4202	K1MN26B00037	CONNECTOR	[M]
FP5101	K1MN30B00098	F/E CONNECTOR	[M]
FP5102	K1MN50B00010	CONNECTOR	[M]
FP5201	K1MN50B00010	CONNECTOR	[M]
		HOLDERS	
H501	RJS1A5505	5P WIRE HOLDER	[M]
H503	RJS1A5512	12P WIRE HOLDER	[M]
H505	RMR0321	12P CABLE HOLDER	[M]
		JACKS	
JK101	K1U208B00002	JK VIDEO	[M]
JK102	K2HA103B0022	JK 3 PIN	[M]
JK103	RJH2213N	JK 2P RCA PIN	[M]
JK104	RJH2603N-5	JK 6 PIN RCA	[M]
JK500	K2AB2B000002	JK AC INLET	[M] ⚠
JK501	RJH5603-9	JK SPEAKER	[M]
JK502	RJH5603-10	JK SPEAKER	[M]
JK603	K2HB102J0038	JACK	[M]
		EARTH TERMINAL	
E501	SNE1004-2	EARTH TERMINAL	[M]
E502	SNE1004-2	EARTH TERMINAL	[M]
		WIRES	
W1	REE1042	1P PRI WIRES	[M]
W1	REZ1023-1	4P WIRE	[M]
W2	REE1043	1P PRI WIRES	[M]
W2	REZ1024	3P WIRE	[M]
W501	REX1037-J	5P WIRE	[M]
W503	REX1035	12P WIRE	[M]
W505	RWJ1112080RX	12P WIRE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
W705	REX1036	2P WIRE	[M]
W904	REX1087	2P WIRE	[M]
		RESISTORS	
R1	ERDS2TJ102T	1K 1/4W	[M]
R1	ERJ3GEY0R00V	0 1/16W	[M]
R2	ERJ3GEY0R00V	0 1/16W	[M]
R113	ERJ6ENF75R0V	5 1/10W	[M]
R114	ERJ6ENF75R0V	5 1/10W	[M]
R115	ERJ6ENF75R0V	5 1/10W	[M]
R118	ERJ6ENF75R0V	5 1/10W	[M]
R119	ERJ6ENF75R0V	5 1/10W	[M]
R120	ERJ6ENF75R0V	5 1/10W	[M]
R122	ERJ3GEYJ103V	10K 1/16W	[M]
R123	ERJ3GEYJ103V	10K 1/16W	[M]
R129	ERJ3GEYJ682V	6.8K 1/16W	[M]
R130	ERJ3GEYJ104V	100K 1/16W	[M]
R131	ERJ3GEYJ104V	100K 1/16W	[M]
R132	ERJ3GEYJ102V	1K 1/16W	[M]
R133	D0GB154JA002	150K 1/16W	[M]
R134	ERJ3GEYJ104V	100K 1/16W	[M]
R135	ERJ3GEYJ102V	1K 1/16W	[M]
R136	D0GB101JA002	100 1/16W	[M]
R137	D0GB562JA002	5.6K 1/16W	[M]
R138	D0GB273JA002	27K 1/16W	[M]
R139	D0GB562JA002	5.6K 1/16W	[M]
R140	D0GB273JA002	27K 1/16W	[M]
R141	D0GB101JA002	100 1/16W	[M]
R142	ERJ3GEYJ104V	100K 1/16W	[M]
R143	ERJ3GEYJ104V	100K 1/16W	[M]
R144	ERJ3GEYJ823V	82K 1/16W	[M]
R145	ERJ3GEYJ472V	4.7K 1/16W	[M]
R146	D0GB183JA002	18K 1/16W	[M]
R147	ERJ3GEYJ104V	100K 1/16W	[M]
R148	ERJ3GEYJ102V	1K 1/16W	[M]
R149	ERJ3GEYJ102V	1K 1/16W	[M]
R150	ERJ6GEYJ102V	1K 1/10W	[M]
R153	ERJ3GEYJ473V	47K 1/16W	[M]
R154	ERJ3GEYJ102V	1K 1/16W	[M]
R155	ERJ3GEYJ222V	2.2K 1/16W	[M]
R156	ERJ3GEYJ222V	2.2K 1/16W	[M]
R157	ERJ3GEYJ102V	1K 1/16W	[M]
R158	ERJ3GEYJ104V	100K 1/16W	[M]
R159	ERJ3GEYJ473V	47K 1/16W	[M]
R160	ERJ3GEYJ102V	1K 1/16W	[M]
R161	ERJ3GEYJ222V	2.2K 1/16W	[M]
R162	ERJ3GEYJ102V	1K 1/16W	[M]
R163	ERJ3GEYJ102V	1K 1/16W	[M]
R164	ERJ3GEYJ103V	10K 1/16W	[M]
R165	D0GB272JA002	2.7K 1/16W	[M]
R166	D0GB183JA002	18K 1/16W	[M]
R167	ERJ3GEYJ103V	10K 1/16W	[M]
R168	ERJ3GEYJ123V	12K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R169	D0GB392JA002	3.9K 1/16W	[M]
R170	ERJ3GEYJ104V	100K 1/16W	[M]
R171	ERJ3GEYJ104V	100K 1/16W	[M]
R172	ERJ3GEYJ104V	100K 1/16W	[M]
R173	D0GB100JA002	10 1/16W	[M]
R181	ERJ3GEYJ473V	47K 1/16W	[M]
R182	ERJ3GEYJ473V	47K 1/16W	[M]
R183	D0GB563JA002	56K 1/16W	[M]
R184	D0GB563JA002	56K 1/16W	[M]
R186	D0GB332JA002	3.3K 1/16W	[M]
R187	D0GB332JA002	3.3K 1/16W	[M]
R188	ERJ3GEYJ222V	2.2K 1/16W	[M]
R189	ERJ3GEYJ103V	10K 1/16W	[M]
R190	ERJ3GEYJ103V	10K 1/16W	[M]
R196	ERJ3GEYJ123V	12K 1/16W	[M]
R197	D0GB392JA002	3.9K 1/16W	[M]
R198	ERJ3GEYJ123V	12K 1/16W	[M]
R199	D0GB392JA002	3.9K 1/16W	[M]
R200	ERJ3GEYJ102V	1K 1/16W	[M]
R201	D0GB392JA002	3.9K 1/16W	[M]
R203	D0GB183JA002	18K 1/16W	[M]
R204	ERJ3GEYJ102V	1K 1/16W	[M]
R205	D0GB392JA002	3.9K 1/16W	[M]
R207	D0GB183JA002	18K 1/16W	[M]
R210	ERJ3GEYJ123V	12K 1/16W	[M]
R211	ERJ3GEYJ102V	1K 1/16W	[M]
R212	ERJ3GEYJ123V	12K 1/16W	[M]
R213	D0GB332JA002	3.3K 1/16W	[M]
R214	ERJ3GEYJ391V	390 1/16W	[M]
R215	ERJ3GEYJ222V	2.2K 1/16W	[M]
R216	ERJ3GEYJ222V	2.2K 1/16W	[M]
R217	ERJ3GEYJ472V	4.7K 1/16W	[M]
R218	ERJ3GEYJ473V	47K 1/16W	[M]
R219	ERJ3GEYJ473V	47K 1/16W	[M]
R220	ERJ3GEYJ473V	47K 1/16W	[M]
R221	ERJ3GEYJ222V	2.2K 1/16W	[M]
R229	ERJ3GEYJ123V	12K 1/16W	[M]
R230	D0GB392JA002	3.9K 1/16W	[M]
R231	ERJ3GEYJ123V	12K 1/16W	[M]
R232	D0GB392JA002	3.9K 1/16W	[M]
R233	ERJ3GEYJ123V	12K 1/16W	[M]
R234	D0GB392JA002	3.9K 1/16W	[M]
R235	D0GB122JA019	1.2K 1/16W	[M]
R236	ERJ3GEYJ104V	100K 1/16W	[M]
R237	D0GB122JA019	1.2K 1/16W	[M]
R238	ERJ3GEYJ104V	100K 1/16W	[M]
R241	D0GB152JA002	1.5K 1/16W	[M]
R242	ERJ3GEYJ153V	15K 1/16W	[M]
R243	D0GB152JA002	1.5K 1/16W	[M]
R244	ERJ3GEYJ102V	1K 1/16W	[M]
R245	ERJ3GEYJ102V	1K 1/16W	[M]
R246	ERJ3GEYJ102V	1K 1/16W	[M]
R247	ERJ3GEYJ223V	22K 1/16W	[M]
R248	ERJ3GEYJ223V	22K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R251	ERJ3GEYJ104V	100K 1/16W	[M]
R252	ERJ3GEYJ471V	470 1/16W	[M]
R253	ERJ3GEYJ471V	470 1/16W	[M]
R254	ERJ3GEYJ104V	100K 1/16W	[M]
R255	ERJ3GEYJ104V	100K 1/16W	[M]
R256	ERJ3GEYJ102V	1K 1/16W	[M]
R257	ERJ3GEYJ123V	12K 1/16W	[M]
R258	ERJ3GEYJ182V	1.8K 1/16W	[M]
R259	ERJ3GEYJ682V	6.8K 1/16W	[M]
R260	D0GB332JA002	3.3K 1/16W	[M]
R261	ERJ3GEYJ682V	6.8K 1/16W	[M]
R262	D0GB332JA002	3.3K 1/16W	[M]
R263	ERJ3GEYJ822V	8.2K 1/16W	[M]
R264	D0GB272JA002	2.7K 1/16W	[M]
R265	ERJ3GEYJ103V	10K 1/16W	[M]
R266	ERJ3GEYJ103V	10K 1/16W	[M]
R267	ERJ3GEYJ104V	100K 1/16W	[M]
R268	ERJ3GEYJ104V	100K 1/16W	[M]
R269	ERJ3GEYJ223V	22K 1/16W	[M]
R270	ERJ3GEYJ223V	22K 1/16W	[M]
R271	D0GB183JA002	18K 1/16W	[M]
R272	D0GB183JA002	18K 1/16W	[M]
R273	ERJ3GEYJ102V	1K 1/16W	[M]
R274	ERJ3GEYJ102V	1K 1/16W	[M]
R275	D0GB154JA002	150K 1/16W	[M]
R276	D0GB154JA002	150K 1/16W	[M]
R277	ERJ3GEYJ103V	10K 1/16W	[M]
R278	ERJ3GEYJ103V	10K 1/16W	[M]
R279	ERJ3GEYJ104V	100K 1/16W	[M]
R280	ERJ3GEYJ104V	100K 1/16W	[M]
R281	ERJ3GEYJ223V	22K 1/16W	[M]
R282	ERJ3GEYJ223V	22K 1/16W	[M]
R283	D0GB183JA002	18K 1/16W	[M]
R284	D0GB183JA002	18K 1/16W	[M]
R285	ERJ3GEYJ102V	1K 1/16W	[M]
R286	ERJ3GEYJ102V	1K 1/16W	[M]
R287	ERJ3GEYJ103V	10K 1/16W	[M]
R288	ERJ3GEYJ103V	10K 1/16W	[M]
R289	ERJ3GEYJ104V	100K 1/16W	[M]
R290	ERJ3GEYJ104V	100K 1/16W	[M]
R291	ERJ3GEYJ223V	22K 1/16W	[M]
R292	ERJ3GEYJ223V	22K 1/16W	[M]
R293	D0GB183JA002	18K 1/16W	[M]
R294	D0GB273JA002	27K 1/16W	[M]
R295	ERJ3GEYJ102V	1K 1/16W	[M]
R296	ERJ3GEYJ102V	1K 1/16W	[M]
R297	ERJ3GEYJ102V	1K 1/16W	[M]
R298	ERJ3GEYJ102V	1K 1/16W	[M]
R299	ERJ3GEYJ102V	1K 1/16W	[M]
R300	ERJ3GEYJ102V	1K 1/16W	[M]
R301	ERJ3GEYJ102V	1K 1/16W	[M]
R302	ERJ3GEYJ102V	1K 1/16W	[M]
R303	ERJ3GEYJ473V	47K 1/16W	[M]
R304	ERJ3GEYJ473V	47K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R305	ERJ3GEYJ473V	47K 1/16W	[M]
R306	ERJ3GEYJ473V	47K 1/16W	[M]
R307	ERJ3GEYJ473V	47K 1/16W	[M]
R308	ERJ3GEYJ473V	47K 1/16W	[M]
R319	ERJ3GEYJ102V	1K 1/16W	[M]
R321	ERJ3GEYJ223V	22K 1/16W	[M]
R401	ERDS2TJ822T	8.2K 1/4W	[M]
R402	ERDS2TJ823T	82K 1/4W	[M]
R403	ERDS2TJ102T	1K 1/4W	[M]
R404	ERDS2TJ103T	10K 1/4W	[M]
R405	ERDS2TJ104T	100K 1/4W	[M]
R406	ERDS2TJ104T	100K 1/4W	[M]
R407	ERDS2TJ102T	1K 1/4W	[M]
R408	ERDS2TJ102T	1K 1/4W	[M]
R409	ERDS2TJ332T	3.3K 1/4W	[M]
R410	ERDS2TJ332T	3.3K 1/4W	[M]
R411	ERDS2TJ332T	3.3K 1/4W	[M]
R412	ERDS2TJ332T	3.3K 1/4W	[M]
R413	ERDS2TJ683T	68K 1/4W	[M]
R414	ERDS2TJ683T	68K 1/4W	[M]
R415	ERDS2TJ390T	39 1/4W	[M]
R416	ERDS2TJ390T	39 1/4W	[M]
R417	ERDS2TJ390T	39 1/4W	[M]
R418	ERDS2TJ390T	39 1/4W	[M]
R419	ERDS2TJ154T	150K 1/4W	[M]
R420	ERDS2TJ101T	100 1/4W	[M]
R421	ERDS2TJ101T	100 1/4W	[M]
R423	ERDS2TJ124T	120K 1/4W	[M]
R424	ERDS2TJ102T	1K 1/4W	[M]
R425	ERDS2TJ272T	2.7K 1/4W	[M]
R426	ERDS2TJ102T	1K 1/4W	[M]
R427	ERDS2TJ123T	12K 1/4W	[M]
R428	ERDS2TJ332T	3.3K 1/4W	[M]
R429	ERDS2TJ102T	1K 1/4W	[M]
R430	ERDS2TJ333T	33K 1/4W	[M]
R431	ERDS2TJ183T	18K 1/4W	[M]
R432	ERDS2TJ683T	68K 1/4W	[M]
R433	ERDS2TJ683T	68K 1/4W	[M]
R434	ERDS2TJ153T	15K 1/4W	[M]
R435	ERDS2TJ274T	270K 1/4W	[M]
R436	ERDS2TJ823T	82K 1/4W	[M]
R437	ERDS2TJ823T	82K 1/4W	[M]
R438	ERDS2TJ822T	8.2K 1/4W	[M]
R439	ERDS2TJ153T	15K 1/4W	[M]
R440	ERDS2TJ153T	15K 1/4W	[M]
R441	ERDS2TJ393T	39K 1/4W	[M]
R442	ERDS2TJ393T	39K 1/4W	[M]
R443	ERDS2TJ102T	1K 1/4W	[M]
R444	ERDS2TJ103T	10K 1/4W	[M]
R445	ERDS2TJ222T	2.2K 1/4W	[M]
R446	ERDS2TJ102T	1K 1/4W	[M]
R447	ERDS2TJ104T	100K 1/4W	[M]
R448	ERDS2TJ154T	150K 1/4W	[M]
R449	ERDS2TJ100T	10 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R450	ERDS2TJ100T	10 1/4W	[M]
R452	ERJ3GEYJ103V	10K 1/16W	[M]
R453	D0GB821JA002	820 1/16W	[M]
R454	ERJ3GEYJ103V	10K 1/16W	[M]
R455	ERJ3GEYJ221V	220 1/16W	[M]
R456	ERJ3GEYJ221V	220 1/16W	[M]
R457	ERJ3GEYJ221V	220 1/16W	[M]
R458	ERJ3GEYJ221V	220 1/16W	[M]
R459	ERJ3GEYJ221V	220 1/16W	[M]
R460	ERJ3GEYJ681V	680 1/16W	[M]
R461	ERJ3GEYJ102V	1K 1/16W	[M]
R462	ERJ3GEYJ221V	220 1/16W	[M]
R463	ERJ3GEYJ103V	10K 1/16W	[M]
R464	ERJ3GEYJ104V	100K 1/16W	[M]
R465	ERJ3GEYJ472V	4.7K 1/16W	[M]
R466	ERJ3GEYJ473V	47K 1/16W	[M]
R467	ERJ3GEYJ472V	4.7K 1/16W	[M]
R468	ERJ3GEYJ472V	4.7K 1/16W	[M]
R469	ERJ3GEYJ472V	4.7K 1/16W	[M]
R470	ERJ3GEYJ472V	4.7K 1/16W	[M]
R471	ERJ3GEYJ221V	220 1/16W	[M]
R472	ERJ3GEYJ221V	220 1/16W	[M]
R473	ERJ3GEYJ221V	220 1/16W	[M]
R474	ERJ3GEYJ221V	220 1/16W	[M]
R475	ERJ3GEYJ103V	10K 1/16W	[M]
R476	ERJ3GEYJ221V	220 1/16W	[M]
R478	ERJ3GEYJ472V	4.7K 1/16W	[M]
R479	ERJ3GEYJ104V	100K 1/16W	[M]
R480	ERJ3GEYJ103V	10K 1/16W	[M]
R481	ERJ3GEYJ103V	10K 1/16W	[M]
R482	ERJ3GEYJ103V	10K 1/16W	[M]
R483	ERJ3GEYJ103V	10K 1/16W	[M]
R484	ERJ3GEYJ102V	1K 1/16W	[M]
R485	ERJ3GEYJ472V	4.7K 1/16W	[M]
R486	ERJ3GEYJ472V	4.7K 1/16W	[M]
R487	ERJ3GEYJ103V	10K 1/16W	[M]
R491	ERJ3GEYJ221V	220 1/16W	[M]
R492	ERJ3GEYJ221V	220 1/16W	[M]
R500	ERC12UGK335D	3.3M 1/2W	[M]
R501	ERDS2TJ472T	4.7K 1/4W	[M]
R502	ERDS2TJ472T	4.7K 1/4W	[M]
R503	ERDS2TJ153T	15K 1/4W	[M]
R504	ERDS2TJ153T	15K 1/4W	[M]
R505	ERDS2TJ153T	15K 1/4W	[M]
R506	ERDS2TJ153T	15K 1/4W	[M]
R507	ERDS2TJ472T	4.7K 1/4W	[M]
R508	ERDS2TJ472T	4.7K 1/4W	[M]
R509	ERDS2TJ392T	3.9K 1/4W	[M]
R510	ERDS2TJ472T	4.7K 1/4W	[M]
R511	ERDS2TJ153T	15K 1/4W	[M]
R512	ERDS2TJ153T	15K 1/4W	[M]
R513	ERDS2TJ563T	56K 1/4W	[M]
R514	ERDS2TJ563T	56K 1/4W	[M]
R515	ERDS2TJ563T	56K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R516	ERDS2TJ563T	56K 1/4W	[M]
R517	ERDS2TJ563T	56K 1/4W	[M]
R518	ERDS2TJ563T	56K 1/4W	[M]
R519	ERDS2TJ474T	470K 1/4W	[M]
R520	ERDS2TJ223T	22K 1/4W	[M]
R521	ERDS2TJ223T	22K 1/4W	[M]
R522	ERDS2TJ103T	10K 1/4W	[M]
R523	ERDS2TJ124T	120K 1/4W	[M]
R524	ERDS2TJ104T	100K 1/4W	[M]
R525	ERDS2TJ563T	56K 1/4W	[M]
R526	ERDS2TJ473T	47K 1/4W	[M]
R527	ERDS2TJ184T	180K 1/4W	[M]
R528	ERDS2TJ154T	150K 1/4W	[M]
R529	ERDS2TJ223T	22K 1/4W	[M]
R530	ERDS1FVJ100T	10 1/2W	[M]
R531	ERDS1FVJ100T	10 1/2W	[M]
R532	ERDS2TJ183T	18K 1/4W	[M]
R533	ERDS2TJ153T	15K 1/4W	[M]
R535	ERDS2TJ390T	39 1/4W	[M]
R536	ERDS2TJ390T	39 1/4W	[M]
R537	ERDS2TJ390T	39 1/4W	[M]
R538	ERDS2TJ223T	22K 1/4W	[M]
R539	ERDS1FVJ100T	10 1/2W	[M]
R540	ERDS1FVJ100T	10 1/2W	[M]
R541	ERDS1FVJ100T	10 1/2W	[M]
R542	ERDS1FVJ100T	10 1/2W	[M]
R543	ERDS2TJ2R2T	2.2 1/4W	[M]
R544	ERDS2TJ2R2T	2.2 1/4W	[M]
R545	ERDS2TJ184T	180K 1/4W	[M]
R546	ERDS2TJ224T	220K 1/4W	[M]
R547	ERDS2TJ222T	2.2K 1/4W	[M]
R548	ERDS2TJ104T	100K 1/4W	[M]
R550	ERDS1FVJ2R2T	2.2 1/2W	[M]
R554	ERDS2TJ153T	15K 1/4W	[M]
R555	ERDS2TJ392T	3.9K 1/4W	[M]
R556	ERDS2TJ152T	1.5K 1/4W	[M]
R557	ERDS2TJ332T	3.3K 1/4W	[M]
R558	ERDS2TJ152T	1.5K 1/4W	[M]
R559	ERDS1FVJ2R2T	2.2 1/2W	[M]
R560	ERDS2TJ472T	4.7K 1/4W	[M]
R561	ERDS2TJ151T	150 1/4W	[M]
R562	ERDS2TJ220T	22 1/4W	[M]
R563	ERDS2TJ220T	22 1/4W	[M]
R564	ERDS2TJ332T	3.3K 1/4W	[M]
R565	ERDS2TJ472T	4.7K 1/4W	[M]
R566	ERDS2TJ473T	47K 1/4W	[M]
R567	ERDS2TJ683T	68K 1/4W	[M]
R568	ERDS2TJ224T	220K 1/4W	[M]
R569	ERDS2TJ472T	4.7K 1/4W	[M]
R570	ERDS2TJ103T	10K 1/4W	[M]
R571	ERDS2TJ393T	39K 1/4W	[M]
R572	ERDS2TJ223T	22K 1/4W	[M]
R573	ERDS2TJ474T	470K 1/4W	[M]
R574	ERDS2TJ224T	220K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R575	ERDS2TJ563T	56K 1/4W	[M]
R576	ERDS2TJ824T	820K 1/4W	[M]
R577	ERDS2TJ103T	10K 1/4W	[M]
R578	ERDS2TJ824T	820K 1/4W	[M]
R579	ERDS2TJ562T	5.6K 1/4W	[M]
R580	ERDS2TJ472T	4.7K 1/4W	[M]
R581	ERDS2TJ103T	10K 1/4W	[M]
R582	ERDS1FVJ180T	18 1/2W	[M]
R583	ERDS2TJ224T	220K 1/4W	[M]
R584	ERDS2TJ101T	100 1/4W	[M]
R585	ERDS2TJ563T	56K 1/4W	[M]
R586	ERDS2TJ103T	10K 1/4W	[M]
R589	ERDS2TJ103T	10K 1/4W	[M]
R590	ERDS2TJ223T	22K 1/4W	[M]
R593	ERDS2TJ103T	10K 1/4W	[M]
R594	ERDS2TJ103T	10K 1/4W	[M]
R596	ERDS2TJ151T	150 1/4W	[M]
R597	ERDS2TJ102T	1K 1/4W	[M]
R599	ERDS2TJ103T	10K 1/4W	[M]
R601	ERJ3GEYJ104V	100K 1/16W	[M]
R602	D0GB101JA002	100 1/16W	[M]
R603	D0GB101JA002	100 1/16W	[M]
R604	ERJ3GEYJ104V	100K 1/16W	[M]
R605	ERJ3GEYJ103V	10K 1/16W	[M]
R606	ERJ3GEYJ103V	10K 1/16W	[M]
R607	ERJ3GEYJ224V	220K 1/16W	[M]
R608	ERJ3GEYJ102V	1K 1/16W	[M]
R609	D0GB101JA002	100 1/16W	[M]
R610	D0GB101JA002	100 1/16W	[M]
R611	D0GB101JA002	100 1/16W	[M]
R612	D0GB101JA002	100 1/16W	[M]
R613	D0GB101JA002	100 1/16W	[M]
R614	D0GB101JA002	100 1/16W	[M]
R615	D0GB101JA002	100 1/16W	[M]
R616	D0GB101JA002	100 1/16W	[M]
R617	D0GB101JA002	100 1/16W	[M]
R618	D0GB101JA002	100 1/16W	[M]
R619	ERJ3GEYJ103V	10K 1/16W	[M]
R620	ERJ3GEYJ103V	10K 1/16W	[M]
R621	D0GB821JA002	820 1/16W	[M]
R622	D0GB101JA002	100 1/16W	[M]
R623	ERJ3GEYJ222V	2.2K 1/16W	[M]
R624	ERJ3GEYJ223V	22K 1/16W	[M]
R625	ERJ3GEYJ223V	22K 1/16W	[M]
R627	ERJ3GEYJ104V	100K 1/16W	[M]
R628	ERJ3GEYJ472V	4.7K 1/16W	[M]
R629	ERJ3GEYJ221V	220 1/16W	[M]
R630	D0GB101JA002	100 1/16W	[M]
R631	D0GB101JA002	100 1/16W	[M]
R632	ERJ3GEYJ223V	22K 1/16W	[M]
R633	ERJ3GEYJ102V	1K 1/16W	[M]
R636	ERJ3GEYJ331V	330 1/16W	[M]
R637	ERJ3GEYJ473V	47K 1/16W	[M]
R638	ERJ3GEYJ223V	22K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R639	ERJ3GEYJ473V	47K 1/16W	[M]
R640	D0GB101JA002	100 1/16W	[M]
R641	D0GB101JA002	100 1/16W	[M]
R642	D0GB101JA002	100 1/16W	[M]
R643	D0GB101JA002	100 1/16W	[M]
R644	D0GB101JA002	100 1/16W	[M]
R645	D0GB101JA002	100 1/16W	[M]
R646	D0GB101JA002	100 1/16W	[M]
R647	D0GB101JA002	100 1/16W	[M]
R649	ERJ3GEYJ181V	180 1/16W	[M]
R650	ERJ3GEYJ223V	22K 1/16W	[M]
R651	ERJ3GEYJ681V	680 1/16W	[M]
R652	ERJ3GEYJ473V	47K 1/16W	[M]
R653	ERJ3GEYJ473V	47K 1/16W	[M]
R654	ERJ3GEYJ104V	100K 1/16W	[M]
R657	D0GB680JA019	68 1/16W	[M]
R658	D0GB680JA019	68 1/16W	[M]
R661	D0GB101JA002	100 1/16W	[M]
R664	D0GB821JA002	820 1/16W	[M]
R665	ERJ3GEYJ221V	220 1/16W	[M]
R666	ERJ3GEYJ221V	220 1/16W	[M]
R667	ERJ3GEYJ221V	220 1/16W	[M]
R668	ERJ3GEYJ221V	220 1/16W	[M]
R669	ERJ3GEYJ221V	220 1/16W	[M]
R671	ERJ3GEYJ104V	100K 1/16W	[M]
R672	ERJ3GEYJ104V	100K 1/16W	[M]
R673	ERJ3GEYJ104V	100K 1/16W	[M]
R674	ERJ3GEYJ104V	100K 1/16W	[M]
R675	ERJ3GEYJ104V	100K 1/16W	[M]
R676	ERJ3GEYJ104V	100K 1/16W	[M]
R677	ERJ3GEYJ104V	100K 1/16W	[M]
R678	ERJ3GEYJ104V	100K 1/16W	[M]
R683	ERJ3GEYJ472V	4.7K 1/16W	[M]
R684	ERJ3GEYJ102V	1K 1/16W	[M]
R685	ERJ3GEYJ102V	1K 1/16W	[M]
R686	D0GB122JA019	1.2K 1/16W	[M]
R687	ERJ3GEYJ182V	1.8K 1/16W	[M]
R688	ERJ3GEYJ222V	2.2K 1/16W	[M]
R689	D0GB272JA002	2.7K 1/16W	[M]
R690	ERJ3GEYJ472V	4.7K 1/16W	[M]
R691	ERJ3GEYJ682V	6.8K 1/16W	[M]
R692	ERJ3GEYJ103V	10K 1/16W	[M]
R693	ERJ3GEYJ472V	4.7K 1/16W	[M]
R694	ERJ3GEYJ102V	1K 1/16W	[M]
R695	ERJ3GEYJ102V	1K 1/16W	[M]
R696	D0GB122JA019	1.2K 1/16W	[M]
R697	ERJ3GEYJ182V	1.8K 1/16W	[M]
R698	ERJ3GEYJ222V	2.2K 1/16W	[M]
R703	ERJ3GEYJ472V	4.7K 1/16W	[M]
R704	ERJ3GEYJ331V	330 1/16W	[M]
R705	ERJ3GEYJ104V	100K 1/16W	[M]
R707	D0GB821JA002	820 1/16W	[M]
R708	ERJ3GEYJ223V	22K 1/16W	[M]
R709	ERJ3GEYJ561V	560 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R710	ERJ3GEYJ561V	560 1/16W	[M]
R711	D0GB1R0JA002	1 1/16W	[M]
R712	D0GB1R0JA002	1 1/16W	[M]
R713	D0GB1R0JA002	1 1/16W	[M]
R714	D0GB1R0JA002	1 1/16W	[M]
R715	D0GB1R0JA002	1 1/16W	[M]
R716	D0GB1R0JA002	1 1/16W	[M]
R717	ERJ3GEYJ223V	22K 1/16W	[M]
R718	ERJ3GEYJ102V	1K 1/16W	[M]
R719	ERJ3GEYJ822V	8.2K 1/16W	[M]
R720	ERJ3GEYJ222V	2.2K 1/16W	[M]
R727	D0GB334JA002	330K 1/16W	[M]
R728	ERJ3GEYJ472V	4.7K 1/16W	[M]
R729	ERJ3GEYJ681V	680 1/16W	[M]
R730	D0GB154JA002	150K 1/16W	[M]
R731	ERJ3GEYJ472V	4.7K 1/16W	[M]
R732	ERJ3GEYJ681V	680 1/16W	[M]
R740	ERJ3GEYJ222V	2.2K 1/16W	[M]
R741	D0GB561JA002	560 1/16W	[M]
R742	ERJ3GEYJ102V	1K 1/16W	[M]
R835	D0GB183JA002	18K 1/16W	[M]
R838	ERJ3GEYJ103V	10K 1/16W	[M]
R839	ERJ3GEYJ103V	10K 1/16W	[M]
R840	ERJ3GEYJ102V	1K 1/16W	[M]
R841	ERJ3GEYJ104V	100K 1/16W	[M]
R843	ERJ3GEYJ223V	22K 1/16W	[M]
R844	ERJ3GEYJ104V	100K 1/16W	[M]
R847	ERJ3GEYJ472V	4.7K 1/16W	[M]
R848	ERJ3GEYJ221V	220 1/16W	[M]
R849	D0GB105JA002	1M 1/16W	[M]
R850	D0GB271JA002	270 1/16W	[M]
R851	D0GB271JA002	270 1/16W	[M]
R852	ERJ3GEYJ561V	560 1/16W	[M]
R853	ERJ3GEYJ561V	560 1/16W	[M]
R856	D0GB333JA002	33K 1/16W	[M]
R857	ERJ3GEYJ223V	22K 1/16W	[M]
R858	D0GB333JA002	33K 1/16W	[M]
R859	ERJ3GEYJ102V	1K 1/16W	[M]
R860	D0GB183JA002	18K 1/16W	[M]
R861	ERJ3GEYJ222V	2.2K 1/16W	[M]
R862	ERJ3GEYJ222V	2.2K 1/16W	[M]
R863	ERJ3GEYJ472V	4.7K 1/16W	[M]
R864	D0GB563JA002	56K 1/16W	[M]
R865	ERJ3GEYJ103V	10K 1/16W	[M]
R866	ERJ3GEYJ221V	220 1/16W	[M]
R867	ERJ3GEYJ221V	220 1/16W	[M]
R868	ERJ3GEYJ103V	10K 1/16W	[M]
R869	ERJ3GEYJ221V	220 1/16W	[M]
R870	ERJ3GEYJ681V	680 1/16W	[M]
R871	ERJ3GEYJ331V	330 1/16W	[M]
R872	ERJ3GEYJ104V	100K 1/16W	[M]
R873	ERJ3GEYJ472V	4.7K 1/16W	[M]
R874	ERJ3GEYJ472V	4.7K 1/16W	[M]
R875	ERJ3GEYJ104V	100K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R876	ERJ3GEYJ102V	1K 1/16W	[M]
R877	ERJ3GEYJ102V	1K 1/16W	[M]
R878	ERJ3GEYJ102V	1K 1/16W	[M]
R879	ERJ3GEYJ102V	1K 1/16W	[M]
R880	ERJ3GEYJ102V	1K 1/16W	[M]
R881	ERJ3GEYJ102V	1K 1/16W	[M]
R882	ERJ3GEYJ102V	1K 1/16W	[M]
R883	ERJ3GEYJ470V	47 1/16W	[M]
R885	ERJ3GEYJ472V	4.7K 1/16W	[M]
R887	ERJ3GEYJ331V	330 1/16W	[M]
R888	D0GB1R0JA002	1 1/16W	[M]
R889	D0GB1R0JA002	1 1/16W	[M]
R890	ERJ3GEYJ472V	4.7K 1/16W	[M]
R891	D0GB124JA002	120K 1/16W	[M]
R892	D0GB122JA019	1.2K 1/16W	[M]
R893	ERJ3GEYJ472V	4.7K 1/16W	[M]
R894	ERJ3GEYJ472V	4.7K 1/16W	[M]
R895	ERJ3GEYJ823V	82K 1/16W	[M]
R896	D0GB122JA019	1.2K 1/16W	[M]
R897	ERJ3GEYJ331V	330 1/16W	[M]
R898	ERJ3GEYJ102V	1K 1/16W	[M]
R899	ERJ3GEYJ102V	1K 1/16W	[M]
R900	ERJ3GEYJ102V	1K 1/16W	[M]
R901	ERJ3GEYJ102V	1K 1/16W	[M]
R902	ERJ3GEYJ104V	100K 1/16W	[M]
R903	ERJ3GEYJ472V	4.7K 1/16W	[M]
R904	ERJ3GEYJ331V	330 1/16W	[M]
R905	ERJ3GEYJ331V	330 1/16W	[M]
R906	ERJ3GEYJ331V	330 1/16W	[M]
R907	D0GB563JA002	56K 1/16W	[M]
R908	ERJ3GEYJ822V	8.2K 1/16W	[M]
R909	ERJ3GEYJ822V	8.2K 1/16W	[M]
R910	ERJ3GEYJ822V	8.2K 1/16W	[M]
R911	ERJ3GEYJ822V	8.2K 1/16W	[M]
R912	ERJ3GEYJ102V	1K 1/16W	[M]
R913	ERJ3GEYJ102V	1K 1/16W	[M]
R914	ERJ3GEYJ473V	47K 1/16W	[M]
R915	ERJ3GEYJ473V	47K 1/16W	[M]
R916	ERJ3GEYJ104V	100K 1/16W	[M]
R917	ERJ3GEYJ104V	100K 1/16W	[M]
R918	ERJ3GEYJ331V	330 1/16W	[M]
R919	ERJ3GEYJ331V	330 1/16W	[M]
R920	ERJ3GEYJ472V	4.7K 1/16W	[M]
R921	ERJ3GEYJ472V	4.7K 1/16W	[M]
R922	ERJ3GEYJ102V	1K 1/16W	[M]
R923	D0GB122JA019	1.2K 1/16W	[M]
R924	D0GB122JA019	1.2K 1/16W	[M]
R925	ERJ3GEYJ123V	12K 1/16W	[M]
R926	ERJ3GEYJ123V	12K 1/16W	[M]
R927	ERJ3GEYJ123V	12K 1/16W	[M]
R928	D0GB392JA002	3.9K 1/16W	[M]
R929	ERJ3GEYJ682V	6.8K 1/16W	[M]
R930	ERJ3GEYJ682V	6.8K 1/16W	[M]
R931	ERJ3GEYJ123V	12K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R932	D0GB392JA002	3.9K 1/16W	[M]
R933	ERJ3GEYJ682V	6.8K 1/16W	[M]
R934	ERJ3GEYJ682V	6.8K 1/16W	[M]
R936	ERJ3GEYJ103V	10K 1/16W	[M]
R937	ERJ3GEYJ102V	1K 1/16W	[M]
R938	ERJ3GEYJ102V	1K 1/16W	[M]
R939	ERJ3GEYJ473V	47K 1/16W	[M]
R940	ERJ3GEYJ473V	47K 1/16W	[M]
R941	ERJ3GEYJ102V	1K 1/16W	[M]
R942	ERJ3GEYJ102V	1K 1/16W	[M]
R955	ERJ3GEYJ223V	22K 1/16W	[M]
R956	ERJ3GEYJ223V	22K 1/16W	[M]
R2011	J0JBC0000015	00 1/16W	[M]
R2012	D0GB752JA008	7.5K 1/16W	[M]
R2013	J0JBC0000015	00 1/16W	[M]
R2014	D0GB752JA008	7.5K 1/16W	[M]
R2015	J0JBC0000015	00 1/16W	[M]
R2016	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2017	J0JBC0000015	00 1/16W	[M]
R2018	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2021	ERJ3GEYJ153V	15K 1/16W	[M]
R2022	ERJ3GEYJ103V	10K 1/16W	[M]
R2023	ERJ3GEYJ153V	15K 1/16W	[M]
R2031	D0GB683JA002	68K 1/16W	[M]
R2032	ERJ3GEYJ102V	1K 1/16W	[M]
R2033	ERJ3RBD153V	15K 3W	[M]
R2041	ERJ3GEYJ473V	47K 1/16W	[M]
R2045	ERJ3GEYJ823V	82K 1/16W	[M]
R2046	ERJ3GEYJ221V	220 1/16W	[M]
R2051	ERJ3RBD392V	3.9K 3W	[M]
R2501	D0GB101JA002	100 1/16W	[M]
R2502	ERJ3GEYJ153V	15K 1/16W	[M]
R2503	ERJ3GEYJ153V	15K 1/16W	[M]
R2504	ERJ3GEYJ823V	82K 1/16W	[M]
R2505	ERJ3GEYJ823V	82K 1/16W	[M]
R2507	D0GF6R8JA017	6.8 1/16W	[M]
R3001	J0JCC0000119	INDUCTOR	[M]
R3002	ERJ3GEYJ103V	10K 1/16W	[M]
R3003	ERJ3GEYJ103V	10K 1/16W	[M]
R3012	ERJ3GEYJ473V	47K 1/16W	[M]
R3013	ERJ3GEYJ330V	33 1/16W	[M]
R3041	D0GB101JA002	100 1/16W	[M]
R3042	D0GB101JA002	100 1/16W	[M]
R3043	D0GB101JA002	100 1/16W	[M]
R3101	ERJ3RBD153V	15K 3W	[M]
R3102	ERJ3RBD272V	2.7K 3W	[M]
R3103	ERJ3RBD203V	20K 3W	[M]
R3104	ERJ3RBD222V	2.2K 3W	[M]
R3105	ERJ3RBD152V	1.5K 3W	[M]
R3111	ERJ3RED620V	62 3W	[M]
R3112	ERJ3RED150V	15 3W	[M]
R3116	ERJ3RED620V	62 3W	[M]
R3117	ERJ3RED130V	13 3W	[M]
R3121	ERJ3RBD101V	100 3W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R3122	ERJ3RED160V	16 3W	[M]
R3126	ERJ3RED560V	56 3W	[M]
R3131	ERJ3RED560V	56 3W	[M]
R4213	ERJ3GEYJ470V	47 1/16W	[M]
R5101	D0GB560JA002	56 1/16W	[M]
R5102	D0GB560JA002	56 1/16W	[M]
R5103	D0GB560JA002	56 1/16W	[M]
R5105	ERJ12Y0R00H	0 1/2W	[M]
R5107	ERJ3GEY0R00V	0 1/16W	[M]
R5108	ERJ3GEY0R00V	0 1/16W	[M]
R5109	ERJ3GEY0R00V	0 1/16W	[M]
R5111	ERJ3GEYJ2R2V	2.2 1/16W	[M]
R5112	ERJ12YJ270H	27 1/2W	[M]
R5113	ERJ3GEYJ473V	47K 1/16W	[M]
R5114	ERJ3GEYJ223V	22K 1/16W	[M]
R5115	ERJ3GEYJ2R2V	2.2 1/16W	[M]
R5116	ERJ12YJ270H	27 1/2W	[M]
R5117	ERJ3GEYJ473V	47K 1/16W	[M]
R5120	ERJ3GEY0R00V	0 1/16W	[M]
R5121	D0GB560JA002	56 1/16W	[M]
R5122	D0GB560JA002	56 1/16W	[M]
R5123	D0GB560JA002	56 1/16W	[M]
R5124	ERJ3GEYJ472V	4.7K 1/16W	[M]
R5152	ERJ3GEYJ102V	1K 1/16W	[M]
R5201	ERJ3GEY0R00V	0 1/16W	[M]
R5202	ERJ3GEY0R00V	0 1/16W	[M]
R5221	ERJ3GEY0R00V	0 1/16W	[M]
R5222	ERJ3GEYJ102V	1K 1/16W	[M]
R5223	ERJ3GEYJ331V	330 1/16W	[M]
R5225	ERJ3GEY0R00V	0 1/16W	[M]
R5226	ERJ3GEYJ102V	1K 1/16W	[M]
R5227	ERJ3GEYJ331V	330 1/16W	[M]
R5231	J0JCC0000119	INDUCTOR	[M]
R5232	J0JCC0000119	INDUCTOR	[M]
R5233	ERJ3GEYJ222V	2.2K 1/16W	[M]
R5234	ERJ3GEYJ222V	2.2K 1/16W	[M]
R5235	ERJ3GEYJ102V	1K 1/16W	[M]
R6201	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6203	ERJ3GEY0R00V	0 1/16W	[M]
R6261	ERJ3GEYJ103V	10K 1/16W	[M]
R6311	ERJ3GEYJ103V	10K 1/16W	[M]
R6312	ERJ3GEYJ103V	10K 1/16W	[M]
R6351	D0GB101JA002	100 1/16W	[M]
R6562	ERJ3GEYJ471V	470 1/16W	[M]
R6563	ERJ3GEYJ103V	10K 1/16W	[M]
R6564	D0GB100JA002	10 1/16W	[M]
R6565	ERJ3GEYJ470V	47 1/16W	[M]
K2041	ERJ3GEY0R00V	0 1/16W	[M]
K3011	ERJ6GEY0R00V	0 1/10W	[M]
K3012	ERJ3GEY0R00V	0 1/16W	[M]
K3013	ERJ3GEY0R00V	0 1/16W	[M]
K3014	ERJ3GEY0R00V	0 1/16W	[M]
K3015	ERJ3GEY0R00V	0 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
K3016	ERJ3GEY0R00V	0 1/16W	[M]
K3017	ERJ3GEY0R00V	0 1/16W	[M]
K3111	ERJ3GEY0R00V	0 1/16W	[M]
K3116	ERJ3GEY0R00V	0 1/16W	[M]
K3121	ERJ3GEY0R00V	0 1/16W	[M]
K3126	ERJ3GEY0R00V	0 1/16W	[M]
K3131	ERJ3GEY0R00V	0 1/16W	[M]
K6253	ERJ6GEY0R00V	0 1/10W	[M]
K6301	ERJ3GEY0R00V	0 1/16W	[M]
K6302	ERJ3GEY0R00V	0 1/16W	[M]
RA2025	EXBV4V473JV	47K 1/16W	[M]
RA2501	EXBV8V473JV	47K 1/16W	[M]
RA3001	EXBV8V820JV	82 1/16W	[M]
RA3002	EXBV8V820JV	82 1/16W	[M]
RA3003	EXBV8V820JV	82 1/16W	[M]
RA3004	EXBV8V820JV	82 1/16W	[M]
RA3005	EXBV4V220JV	22 1/16W	[M]
RA3009	EXBV8V820JV	82 1/16W	[M]
RA3010	EXBV8V820JV	82 1/16W	[M]
RA3011	EXBV8V820JV	82 1/16W	[M]
RA3012	EXBV8V820JV	82 1/16W	[M]
RA3025	EXBV4V102JV	1K 1/16W	[M]
RA3041	EXBV4V101JV	1K 1/16W	[M]
RA3042	EXBV4V101JV	1K 1/16W	[M]
RA5101	EXBV4V560JV	56 1/16W	[M]
RA5102	EXBV8V560JV	56 1/16W	[M]
RA5103	EXBV4V560JV	56 1/16W	[M]
RA6201	EXBV4V472JV	4.7K 1/16W	[M]
RA6261	EXBV4V103JV	10K 1/16W	[M]
RA6351	EXBV4V472JV	4.7K 1/16W	[M]
		CAPACITORS	
C1	ECEA1CKA101B	100 16V	[M]
C2	ECBT1E103ZF5	0.01 25V	[M]
C101	ECEA0JKA101B	100 6.3V	[M]
C102	ECJ1VB1H103K	0.01 50V	[M]
C104	ECA0JM102B	1000 6.3V	[M]
C105	ECJ1VB1H103K	0.01 50V	[M]
C106	ECEA0JKA331B	330 6.3V	[M]
C107	ECEA1CKA470B	47 16V	[M]
C108	ECEA1CKA470B	47 16V	[M]
C109	ECEA1CKA470B	47 16V	[M]
C110	ECEA0JKA331B	330 6.3V	[M]
C111	ECEA1CKA470B	47 16V	[M]
C112	ECA0JM221B	220 6.3V	[M]
C114	ECJ1VB1H103K	0.01 50V	[M]
C120	ECA0JM102B	1000 6.3V	[M]
C121	ECA0JM102B	1000 6.3V	[M]
C122	ECEA0JKA101B	100 6.3V	[M]
C123	ECEA0JKA101B	100 6.3V	[M]
C125	ECJ1VC1H101K	100P 50V	[M]
C126	ECJ1VC1H101K	100P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C127	ECJ1VB1H103K	0.01 50V	[M]
C128	ECJ1VC1H101K	100P 50V	[M]
C129	ECJ1VC1H101K	100P 50V	[M]
C131	ECJ1VC1H101K	100P 50V	[M]
C132	ECJ1VC1H101K	100P 50V	[M]
C133	ECJ1VB1H103K	0.01 50V	[M]
C134	ECJ1VC1H101K	100P 50V	[M]
C135	ECJ1VC1H101K	100P 50V	[M]
C136	ECJ1VB1H103K	0.01 50V	[M]
C137	ECEA1HKA2R2B	2.2 50V	[M]
C138	ECJ1VC1H470J	47P 50V	[M]
C140	ECEA1HKA010B	1 50V	[M]
C141	ECEA1HKA010B	1 50V	[M]
C142	ECEA1HKA3R3B	3.3 50V	[M]
C143	ECEA1HKA010B	1 50V	[M]
C144	ECJ1VC1H470J	47P 50V	[M]
C145	ECJ1VC1H101K	100P 50V	[M]
C146	ECJ1VB1H103K	0.01 50V	[M]
C147	ECJ1VC1H101K	100P 50V	[M]
C148	ECJ1VC1H470J	47P 50V	[M]
C149	ECEA1HKA010B	1 50V	[M]
C150	ECJ1VC1H470J	47P 50V	[M]
C151	ECJ1VB1H681K	680P 50V	[M]
C152	ECJ1VB1H103K	0.01 50V	[M]
C153	ECJ1VB1H681K	680P 50V	[M]
C154	ECJ1VC1H820J	82P 50V	[M]
C155	ECEA1CKA100B	10 16V	[M]
C156	ECEA1CKA100B	10 16V	[M]
C157	ECUV1H101JCV	100P 50V	[M]
C158	ECEA1CKA100B	10 16V	[M]
C159	ECEA1CKA100B	10 16V	[M]
C160	ECJ1VB1H103K	0.01 50V	[M]
C161	ECJ1VC1H101K	100P 50V	[M]
C162	ECJ1VC1H470J	47P 50V	[M]
C163	ECEA1CKA100B	10 16V	[M]
C164	ECJ1VC1H101K	100P 50V	[M]
C165	ECJ1VC1H470J	47P 50V	[M]
C166	ECUV1C105ZFN	1 16V	[M]
C181	ECEA1HKA010B	1 50V	[M]
C182	ECEA1HKA010B	1 50V	[M]
C183	ECUVNE104KBV	0.1 25V	[M]
C184	ECUVNE104KBV	0.1 25V	[M]
C215	ECEA1HKA010B	1 50V	[M]
C216	ECEA1CKA100B	10 16V	[M]
C217	ECEA1HKAR15B	0.15 50V	[M]
C218	ECEA1CKA100B	10 16V	[M]
C219	ECEA1HKA3R3B	3.3 50V	[M]
C220	ECEA1HKA010B	1 50V	[M]
C221	ECEA1CKA100B	10 16V	[M]
C222	ECEA1HKAR15B	0.15 50V	[M]
C223	ECEA1CKA100B	10 16V	[M]
C224	ECEA1HKA3R3B	3.3 50V	[M]
C225	ECEA1HKA010B	1 50V	[M]
C226	ECEA1CKA100B	10 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C227	ECEA1CKA100B	10 16V	[M]
C228	ECEA1HKA010B	1 50V	[M]
C229	ECEA1HKA010B	1 50V	[M]
C230	ECEA1CKA100B	10 16V	[M]
C231	ECEA1CKA100B	10 16V	[M]
C232	ECEA1HKA2R2B	2.2 50V	[M]
C233	ECUVNE104KBV	0.1 25V	[M]
C235	ECJ1VC1H101K	100P 50V	[M]
C237	ECJ1VC1H101K	100P 50V	[M]
C238	ECJ1VB1H221K	220P 50V	[M]
C239	ECJ1VB1H221K	220P 50V	[M]
C240	ECJ1VC1H470J	47P 50V	[M]
C241	ECJ1VC1H470J	47P 50V	[M]
C242	ECUVNE104KBV	0.1 25V	[M]
C243	ECJ1VB1H103K	0.01 50V	[M]
C251	ECEA1CKA100B	10 16V	[M]
C252	ECUVNE104KBV	0.1 25V	[M]
C253	ECUVNE104KBV	0.1 25V	[M]
C265	ECEA1CKA100B	10 16V	[M]
C266	ECEA1CKA100B	10 16V	[M]
C267	ECJ1VB1H471K	470P 50V	[M]
C268	ECJ1VB1H471K	470P 50V	[M]
C269	ECJ1VC1H470J	47P 50V	[M]
C270	ECJ1VC1H470J	47P 50V	[M]
C271	ECJ1VB1H103K	0.01 50V	[M]
C272	ECJ1VB1H103K	0.01 50V	[M]
C273	ECEA1CKA220B	22 16V	[M]
C274	ECEA1CKA220B	22 16V	[M]
C275	ECEA1CKA100B	10 16V	[M]
C276	ECEA1CKA100B	10 16V	[M]
C277	ECJ1VB1H471K	470P 50V	[M]
C278	ECJ1VB1H471K	470P 50V	[M]
C279	ECJ1VC1H470J	47P 50V	[M]
C280	ECJ1VC1H470J	47P 50V	[M]
C281	ECEA1CKA220B	22 16V	[M]
C282	ECEA1CKA220B	22 16V	[M]
C283	ECEA1CKA100B	10 16V	[M]
C284	ECEA1CKA100B	10 16V	[M]
C285	ECJ1VC1H470J	47P 50V	[M]
C286	ECJ1VC1H470J	47P 50V	[M]
C287	ECJ1VB1H471K	470P 50V	[M]
C288	ECJ1VB1H471K	470P 50V	[M]
C289	ECUVNE104KBV	0.1 25V	[M]
C290	ECUVNE104KBV	0.1 25V	[M]
C291	ECEA1CKA220B	22 16V	[M]
C292	ECEA1CKA220B	22 16V	[M]
C293	ECEA1CKA220B	22 16V	[M]
C294	ECEA1CKA220B	22 16V	[M]
C295	ECJ1VB1H222K	2200P 50V	[M]
C296	ECJ1VB1H222K	2200P 50V	[M]
C297	ECEA1CKA220B	22 16V	[M]
C298	ECEA1CKA220B	22 16V	[M]
C299	ECJ1VB1H222K	2200P 50V	[M]
C300	ECJ1VB1H222K	2200P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C301	ECEA1CKA220B	22 16V	[M]
C302	ECEA1CKA220B	22 16V	[M]
C303	ECJ1VB1H222K	2200P 50V	[M]
C304	ECJ1VB1H222K	2200P 50V	[M]
C309	ECEA1HKA3R3B	3.3 50V	[M]
C401	ECEA1CKA100B	10 16V	[M]
C402	ECEA1HKA3R3B	3.3 50V	[M]
C403	ECEA1HKA4R7B	4.7 50V	[M]
C404	ECEA1HKA4R7B	4.7 50V	[M]
C405	ECEA1HKA3R3B	3.3 50V	[M]
C406	ECEA1CKA100B	10 16V	[M]
C407	ECBT1H103KB5	0.01 50V	[M]
C408	ECBT1H103KB5	0.01 50V	[M]
C409	ECBT1H101KB5	100P 50V	[M]
C410	ECBT1H101KB5	100P 50V	[M]
C411	ECBT1H121KB5	120P 50V	[M]
C412	ECBT1H121KB5	120P 50V	[M]
C413	ECBT1H102KB5	1000P 50V	[M]
C414	ECBT1H102KB5	1000P 50V	[M]
C415	ECBT1H103KB5	0.01 50V	[M]
C416	ECEA1CKA100B	10 16V	[M]
C417	ECEA1HKA3R3B	3.3 50V	[M]
C418	ECFR1C104KR	0.1 16V	[M]
C419	F1C1C393A013	0.039 16V	[M]
C420	ECBT1C562KR5	5600P 16V	[M]
C421	F1D1H473A012	0.047 50V	[M]
C422	ECQV1H154JZ3	0.15 50V	[M]
C423	ECEA1HKA010B	1 50V	[M]
C424	F1D1H473A012	0.047 50V	[M]
C425	ECFR1C104KR	0.1 16V	[M]
C426	ECFR1C104KR	0.1 16V	[M]
C427	F1D1H473A012	0.047 50V	[M]
C428	ECEA1CKA100B	10 16V	[M]
C429	ECEA1HKA010B	1 50V	[M]
C430	ECEA1CKA100B	10 16V	[M]
C431	ECBT1H103KB5	0.01 50V	[M]
C432	ECEA1CKA100B	10 16V	[M]
C433	ECEA1AKA101B	100 10V	[M]
C434	ECEA1HKA4R7B	4.7 50V	[M]
C452	ECUV1E223KBV	0.022 25V	[M]
C453	ECJ1VB1H103K	0.01 50V	[M]
C454	ECEA0JKA470B	47 6.3V	[M]
C455	ECJ1VB1H103K	0.01 50V	[M]
C456	ECJ1VB1H103K	0.01 50V	[M]
C500	ECKWRS102MBC	1000P 400V	[M] ⚠
C501	ECBT1H471KB5	470P 50V	[M]
C502	ECBT1H471KB5	470P 50V	[M]
C503	ECBT1H471KB5	470P 50V	[M]
C504	ECBT1H471KB5	470P 50V	[M]
C505	ECBT1H471KB5	470P 50V	[M]
C506	ECBT1H471KB5	470P 50V	[M]
C507	ECBT1H180JC5	18P 50V	[M]
C508	ECBT1H180JC5	18P 50V	[M]
C509	ECBT1H220JC5	22P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C510	ECBT1H220JC5	22P 50V	[M]
C511	ECBT1H220JC5	22P 50V	[M]
C512	ECBT1H220JC5	22P 50V	[M]
C513	F1D1H473A012	0.047 50V	[M]
C514	ECEA0JKA221B	220 6.3V	[M]
C515	ECKR2H103ZF5	0.01 500V	[M]
C516	ECKR2H103ZF5	0.01 500V	[M]
C517	ECBT1C103NS5	0.01 16V	[M]
C518	F1D1H1040002	0.1 50V	[M]
C519	ECEA1HKA2R2B	2.2 50V	[M]
C520	ECA0JM471B	470 6.3V	[M]
C521	F1D1H473A012	0.047 50V	[M]
C522	F1D1H473A012	0.047 50V	[M]
C523	F1D1H473A012	0.047 50V	[M]
C524	F1D1H473A012	0.047 50V	[M]
C525	F1D1H473A012	0.047 50V	[M]
C526	F1D1H473A012	0.047 50V	[M]
C527	ECEA1VM332B	3300 35V	[M]
C528	F2A1V562A157	5600P 35V	[M]
C529	F2A1V562A157	5600P 35V	[M]
C530	ECEA1VM332B	3300 35V	[M]
C531	ECQE1104KF3	0.1 100V	[M]
C532	ECQE1104KF3	0.1 100V	[M]
C534	ECBT1H102KB5	1000P 50V	[M]
C535	ECA1HM470B	47 50V	[M]
C536	ECBT1H103KB5	0.01 50V	[M]
C537	ECA1EM101B	100 25V	[M]
C538	ECBT1H103KB5	0.01 50V	[M]
C539	ECEA1CKA470B	47 16V	[M]
C541	ECEA1HKA4R7B	4.7 50V	[M]
C542	ECA1EM331B	330 25V	[M]
C543	ECA1EM331B	330 25V	[M]
C544	ECA1HM101B	100 50V	[M]
C545	ECA1HM101B	100 50V	[M]
C546	ECA1JM101B	100 63V	[M]
C547	ECA1JM101B	100 63V	[M]
C548	ECBT1H102KB5	1000P 50V	[M]
C549	ECA1HM100B	10 50V	[M]
C551	ECEA1HKA4R7B	4.7 50V	[M]
C552	F1D1H1040002	0.1 50V	[M]
C553	ECEA0JKA221B	220 6.3V	[M]
C554	ECEA1CKA330B	33 16V	[M]
C555	ECEA0JKA221B	220 6.3V	[M]
C560	ECQE1104KF3	0.1 100V	[M]
C561	ECA1EM222B	2200 25V	[M]
C592	ECBT1H103KB5	0.01 50V	[M]
C593	ECA1CM102B	1000 16V	[M]
C594	ECA1CM102B	1000 16V	[M]
C595	ECEA1VKA4R7B	4.7 35V	[M]
C596	ECBT1H103KB5	0.01 50V	[M]
C597	ECEA1AKA470B	47 10V	[M]
C602	ECUV1H561KBV	560P 50V	[M]
C603	ECUV1H561KBV	560P 50V	[M]
C604	ECEA1CKA100B	10 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C605	ECJ1VB1H102K	1000P 50V	[M]
C609	ECJ1VB1H103K	0.01 50V	[M]
C610	ECJ1VB1H103K	0.01 50V	[M]
C611	ECJ1VB1H103K	0.01 50V	[M]
C612	ECEA1HKA2R2B	2.2 50V	[M]
C619	ECJ1VB1H102K	1000P 50V	[M]
C620	ECJ1VB1H103K	0.01 50V	[M]
C621	ECEA1HKA3R3B	3.3 50V	[M]
C622	ECEA1VKA220B	22 35V	[M]
C623	ECEA1VKA220B	22 35V	[M]
C624	ECEA0JKS101B	100 6.3V	[M]
C625	ECUVNE104KBV	0.1 25V	[M]
C626	ECA0JM471B	470 6.3V	[M]
C627	ECJ1VB1H102K	1000P 50V	[M]
C628	F1H1H331A022	330P 50V	[M]
C629	ECJ1VB1H103K	0.01 50V	[M]
C630	ECEA1AKA220B	22 10V	[M]
C631	ECA0JM471B	470 6.3V	[M]
C672	ECJ1VC1H101K	100P 50V	[M]
C701	ECQE1104KF3	0.1 100V	[M]
C702	ECA1EM472B	4700 25V	[M]
C703	ECEA1CKA100B	10 16V	[M]
C704	ECJ1VB1H103K	0.01 50V	[M]
C705	ECJ1VB1H103K	0.01 50V	[M]
C706	EEUFC0J821B	820P 6.3V	[M]
C707	ECEA1AKA101B	100 10V	[M]
C708	ECEA0JKA221B	220 6.3V	[M]
C709	ECA1EM101B	100 25V	[M]
C710	ECEA1AKA101B	100 10V	[M]
C711	ECEA1CKA100B	10 16V	[M]
C712	ECEA1CKA100B	10 16V	[M]
C714	ECJ1VB1H102K	1000P 50V	[M]
C715	ECJ1VB1H102K	1000P 50V	[M]
C716	ECA1EM222B	2200 25V	[M]
C717	ECJ1VB1H103K	0.01 50V	[M]
C719	ECUVNE104KBV	0.1 25V	[M]
C739	ECUVNA105KBV	1 10V	[M]
C740	ECUVNA105KBV	1 10V	[M]
C741	EEUFC0J821B	820P 6.3V	[M]
C742	ECEA1CKA100B	10 16V	[M]
C743	ECA1EM101B	100 25V	[M]
C838	F1H1H5R0A759	5.0P 50V	[M]
C839	ECJ2VC1H120J	12P 50V	[M]
C840	ECJ1VB1H103K	0.01 50V	[M]
C841	ECJ1VB1H222K	2200P 50V	[M]
C842	ECJ1VB1H222K	2200P 50V	[M]
C843	ECEA1HKA4R7B	4.7 50V	[M]
C844	ECEA1HKA4R7B	4.7 50V	[M]
C845	ECUV1C105ZFN	10 16V	[M]
C846	ECEA1HKA010B	1 50V	[M]
C847	ECUV1C105ZFN	1 16V	[M]
C848	ECJ1VB1H222K	2200P 50V	[M]
C849	ECJ1VB1H681K	680P 50V	[M]
C850	ECJ1VB1H681K	680P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C851	ECJ1VB1H102K	1000P 50V	[M]
C852	ECJ1VB1H102K	1000P 50V	[M]
C853	ECJ1VC1H470J	47P 50V	[M]
C854	ECJ1VC1H470J	47P 50V	[M]
C855	ECJ1VB1H103K	0.01 50V	[M]
C856	ECJ1VB1H103K	0.01 50V	[M]
C857	ECJ1VC1H470J	47P 50V	[M]
C858	ECJ1VB1H222K	2200P 50V	[M]
C859	ECEA1HKA010B	1 50V	[M]
C860	F1H1H331A022	330P 50V	[M]
C861	ECJ1VB1H103K	0.01 50V	[M]
C862	ECJ1VB1H103K	0.01 50V	[M]
C863	ECEA1CKA100B	10 16V	[M]
C864	ECJ1VB1H103K	0.01 50V	[M]
C865	ECJ1VB1H103K	0.01 50V	[M]
C866	ECEA1CKA100B	10 16V	[M]
C867	ECUV1H151KCV	150P 50V	[M]
C868	ECUV1H151KCV	150P 50V	[M]
C869	ECJ1VC1H470J	47P 50V	[M]
C870	ECJ1VC1H470J	47P 50V	[M]
C871	ECJ1VB1H103K	0.01 50V	[M]
C872	ECJ1VB1H471K	470P 50V	[M]
C873	ECJ1VB1H471K	470P 50V	[M]
C874	ECUV1E223KBV	0.022 25V	[M]
C875	ECJ1VB1H103K	0.01 50V	[M]
C876	ECEA0JKA470B	47 6.3V	[M]
C877	ECJ1VB1H103K	0.01 50V	[M]
C878	ECJ1VB1H103K	0.01 50V	[M]
C879	ECUV1C105ZFN	1 16V	[M]
C880	ECJ1VB1H103K	0.01 50V	[M]
C881	ECUV1C105ZFN	1 16V	[M]
C882	ECUVNE104KBV	0.1 25V	[M]
C883	ECEA1HKA010B	1 50V	[M]
C884	ECUV1C105ZFN	1 16V	[M]
C885	F1H1H223A761	0.022 50V	[M]
C886	EEAFC0J101B	100P 6.3V	[M]
C887	ECEA1HKA010B	1 50V	[M]
C888	ECUV1C105ZFN	1 16V	[M]
C889	ECUVNE104KBV	0.1 25V	[M]
C890	ECJ1VB1H332K	3300P 50V	[M]
C891	ECJ1VB1H332K	3300P 50V	[M]
C892	ECEA1HKA010B	1 50V	[M]
C893	ECEA0JKA470B	47 6.3V	[M]
C894	EEAFC0J101B	100P 6.3V	[M]
C895	ECEA1HKAR47B	0.47 50V	[M]
C896	ECEA1HKAR47B	0.47 50V	[M]
C897	ECEA1HKAR47B	0.47 50V	[M]
C898	ECEA1HKA010B	1 50V	[M]
C899	ECEA1HKA4R7B	4.7 50V	[M]
C900	ECEA1HKA4R7B	4.7 50V	[M]
C901	ECEA1CKA101B	100 16V	[M]
C902	ECEA1HKA4R7B	4.7 50V	[M]
C903	ECEA1HKA4R7B	4.7 50V	[M]
C904	ECEA1HKA4R7B	4.7 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C905	ECEA1HKA4R7B	4.7 50V	[M]
C906	ECEA1HKAR47B	0.47 50V	[M]
C907	ECEA1HKAR47B	0.47 50V	[M]
C908	ECEA1HKAR47B	0.47 50V	[M]
C909	ECEA1CKA100B	10 16V	[M]
C910	ECEA1CKA220B	22 16V	[M]
C911	ECEA1CKA220B	22 16V	[M]
C912	ECEA1CKA220B	22 16V	[M]
C913	ECEA1CKA220B	22 16V	[M]
C914	ECEA1CKA100B	10 16V	[M]
C915	ECJ1VB1H222K	2200P 50V	[M]
C916	ECJ1VB1H222K	2200P 50V	[M]
C918	ECUV1E473KBV	0.047 25V	[M]
C919	ECUV1E473KBV	0.047 25V	[M]
C921	ECJ1VB1H102K	1000P 50V	[M]
C2001	F2G0J1010013	100P 6.3V	[M]
C2002	EEVFC0J101P	100P 6.3V	[M]
C2003	ECUVNC104ZFV	0.1 16V	[M]
C2004	ECUVNC104ZFV	0.1 16V	[M]
C2005	ECUVNC104ZFV	0.1 16V	[M]
C2006	ECUVNC104ZFV	0.1 16V	[M]
C2011	ECUV1C104KBV	0.1 16V	[M]
C2012	ECUV1C104KBV	0.1 16V	[M]
C2015	ECJ1VC1H102J	1000P 50V	[M]
C2016	ECUV1H821JCV	820P 50V	[M]
C2021	ECJ1VB1H472K	4700P 50V	[M]
C2023	ECJ1VC1H102J	1000P 50V	[M]
C2031	ECJ1VF1A105Z	10 10V	[M]
C2032	ECJ1VF1A105Z	10 10V	[M]
C2033	F1H0J1050013	10 6.3V	[M]
C2034	ECJ1VB1H152K	1500P 50V	[M]
C2035	ECJ1VC1H221J	220P 50V	[M]
C2036	ECUV1C104KBV	0.1 16V	[M]
C2037	ECJ1VB1C103K	0.01 16V	[M]
C2051	ECUV1C333KBV	0.033 16V	[M]
C2052	ECJ1VC1H330J	33P 50V	[M]
C2053	ECUVNC104ZFV	0.1 16V	[M]
C2054	ECUVNC104ZFV	0.1 16V	[M]
C2055	ECUVNC104ZFV	0.1 16V	[M]
C2056	ECJ1VB1C103K	0.01 16V	[M]
C2057	ECJ1VC1H181J	180P 50V	[M]
C2058	ECJ1VB1C183K	0.018 16V	[M]
C2059	ECJ1VB1H562K	5600P 50V	[M]
C2060	ECUV1C104KBV	0.1 16V	[M]
C2501	EEVFC0J221P	220P 6.3V	[M]
C2502	ECEV1CA101WP	100 16V	[M]
C2503	ECEV1CA220WR	22 16V	[M]
C2504	ECUVNC104ZFV	0.1 16V	[M]
C2505	ECUVNC104ZFV	0.1 16V	[M]
C2506	ECUVNC104ZFV	0.1 16V	[M]
C2507	ECUVNC104ZFV	0.1 16V	[M]
C2508	ECUVNC104ZFV	0.1 16V	[M]
C2509	EEVFC1C100R	10P 16V	[M]
C2510	ECUVNC104ZFV	0.1 16V	[M]

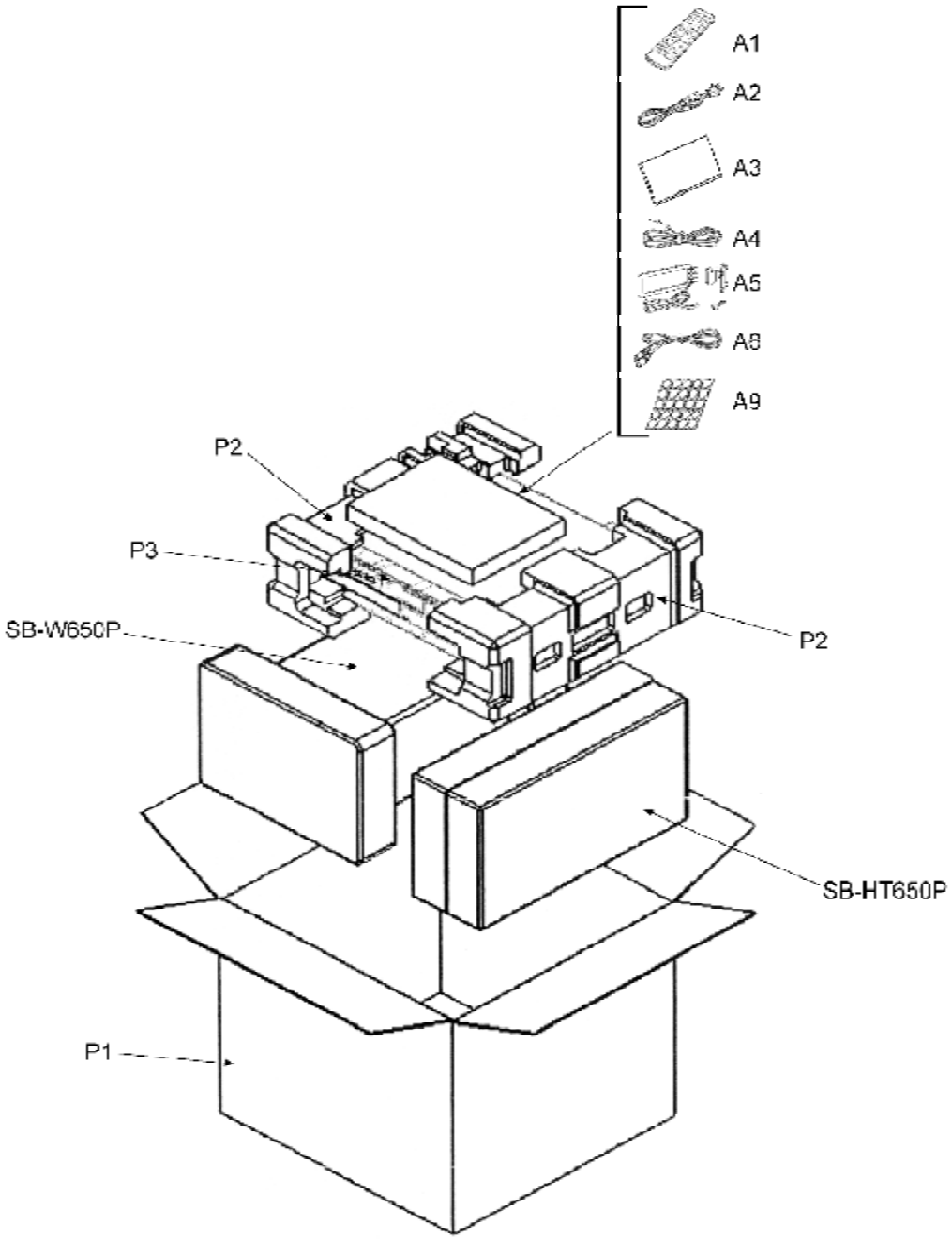
Ref. No.	Part No.	Part Name & Description	Remarks
C2511	ECUVNC104ZFV	0.1 16V	[M]
C2512	ECUVNC104ZFV	0.1 16V	[M]
C2513	ECUVNC104ZFV	0.1 16V	[M]
C3001	F2G0J331A015	330P 6.3V	[M]
C3002	F2G0J331A015	330P 6.3V	[M]
C3003	ECUVNC104ZFV	0.1 16V	[M]
C3004	ECUVNC104ZFV	0.1 16V	[M]
C3005	ECUVNC104ZFV	0.1 16V	[M]
C3006	ECUVNC104ZFV	0.1 16V	[M]
C3007	ECUVNC104ZFV	0.1 16V	[M]
C3008	ECUVNC104ZFV	0.1 16V	[M]
C3009	ECUVNC104ZFV	0.1 16V	[M]
C3010	ECUVNC104ZFV	0.1 16V	[M]
C3011	ECUVNC104ZFV	0.1 16V	[M]
C3012	ECUVNC104ZFV	0.1 16V	[M]
C3013	ECUVNC104ZFV	0.1 16V	[M]
C3014	ECUVNC104ZFV	0.1 16V	[M]
C3015	ECUVNC104ZFV	0.1 16V	[M]
C3016	ECUVNC104ZFV	0.1 16V	[M]
C3017	ECUVNC104ZFV	0.1 16V	[M]
C3018	ECUVNC104ZFV	0.1 16V	[M]
C3019	ERJ3GEYJ331V	330 1/16W	[M]
C3020	ECUVNC104ZFV	0.1 16V	[M]
C3021	ECUVNC104ZFV	0.1 16V	[M]
C3022	ECUVNC104ZFV	0.1 16V	[M]
C3023	ECUVNC104ZFV	0.1 16V	[M]
C3024	ECUVNC104ZFV	0.1 16V	[M]
C3025	ECUVNC104ZFV	0.1 16V	[M]
C3026	ECUVNC104ZFV	0.1 16V	[M]
C3027	ECUVNC104ZFV	0.1 16V	[M]
C3028	ECUVNC104ZFV	0.1 16V	[M]
C3029	ECUVNC104ZFV	0.1 16V	[M]
C3031	ECUVNC104ZFV	0.1 16V	[M]
C3032	ECUVNC104ZFV	0.1 16V	[M]
C3033	ECUVNC104ZFV	0.1 16V	[M]
C3041	ECJ1VC1H220J	22P 50V	[M]
C3051	ECUVNC104ZFV	0.1 16V	[M]
C3052	ECUVNC104ZFV	0.1 16V	[M]
C3053	ECUVNC104ZFV	0.1 16V	[M]
C3054	ECUVNC104ZFV	0.1 16V	[M]
C3055	ECUVNC104ZFV	0.1 16V	[M]
C3061	ECUVNC104ZFV	0.1 16V	[M]
C3062	ECUVNC104ZFV	0.1 16V	[M]
C3063	ECUVNC104ZFV	0.1 16V	[M]
C3064	ECUVNC104ZFV	0.1 16V	[M]
C3065	ECUVNC104ZFV	0.1 16V	[M]
C3101	F2G0J331A015	330P 6.3V	[M]
C3102	ECUVNC104ZFV	0.1 16V	[M]
C3103	ECUVNC104ZFV	0.1 16V	[M]
C3104	ECUVNC104ZFV	0.1 16V	[M]
C3105	F1H0J1050013	10 6.3V	[M]
C3106	F1H0J1050013	10 6.3V	[M]
C3107	ECUVNC104ZFV	0.1 16V	[M]
C4201	F2G0J331A015	330P 6.3V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C4208	ECUVNC104ZFV	0.1 16V	[M]
C4209	ECUVNC104ZFV	0.1 16V	[M]
C4210	ECUVNC104ZFV	0.1 16V	[M]
C4211	F3F1A106A001	10 10V	[M]
C4213	F3F1A106A001	10 10V	[M]
C4215	ECUVNC104ZFV	0.1 16V	[M]
C4216	F2G0J101A015	100P 6.3V	[M]
C4217	ECUVNC104ZFV	0.1 16V	[M]
C4219	F3F1A106A001	10 10V	[M]
C4220	F3F1A106A001	10 10V	[M]
C4222	F2G0J331A015	330P 6.3V	[M]
C5101	EEVHB1C100R	10P 16V	[M]
C5102	ECUVNC104ZFV	0.1 16V	[M]
C5103	ECUVNC104ZFV	0.1 16V	[M]
C5111	EEVHB0J470R	47P 6.3V	[M]
C5115	EEVHB0J470R	47P 6.3V	[M]
C5123	ECUVNC104ZFV	0.1 16V	[M]
C5151	ECUVNC104ZFV	0.1 16V	[M]
C5152	F3F1A106A001	10 10V	[M]
C5201	ECUVNC104ZFV	0.1 16V	[M]
C5202	ECUVNC104ZFV	0.1 16V	[M]
C5203	ECUVNC104ZFV	0.1 16V	[M]
C5221	EEE0JA330WR	33P 6.3V	[M]
C5222	ECUVNC104ZFV	0.1 16V	[M]
C5223	EEE1EA4R7SR	4.7P 25V	[M]
C5225	ECUVNC104ZFV	0.1 16V	[M]
C5226	EEE1EA4R7SR	4.7P 25V	[M]
C5231	ECUV1C104KBV	0.1 16V	[M]
C5232	ECUV1C104KBV	0.1 16V	[M]
C6201	ECUVNC104ZFV	0.1 16V	[M]
C6202	ECJ1VC1H101J	100P 50V	[M]
C6251	ECUV1C104KBV	0.1 16V	[M]
C6252	F1H0J1050013	10 6.3V	[M]
C6253	ECJ1VB1C103K	0.01 16V	[M]
C6255	EEE0JA101SP	100P 6.3V	[M]
C6261	ECUVNC104ZFV	0.1 16V	[M]
C6262	ECUVNC104ZFV	0.1 16V	[M]
C6301	ECUVNC104ZFV	0.1 16V	[M]
C6302	ECUVNC104ZFV	0.1 16V	[M]
C6311	ECUVNC104ZFV	0.1 16V	[M]
C6312	ECUVNC104ZFV	0.1 16V	[M]
C6351	ECUVNC104ZFV	0.1 16V	[M]
C6561	EEE0JA330WR	33P 6.3V	[M]
C6562	EEE0JA330WR	33P 6.3V	[M]
C6563	ECUVNC104ZFV	0.1 16V	[M]
C6564	ECUVNC104ZFV	0.1 16V	[M]
C6565	ECJ1VC1H150J	15P 50V	[M]
C6566	ECJ1VC1H150J	15P 50V	[M]
C6567	ECUVNC104ZFV	0.1 16V	[M]
C6568	ECJ1VC1H150J	15P 50V	[M]

22.4. Packing Materials & Accessories Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPGX1153	PACKING CASE	[M]
P2	RPNX0193	POLYFOAM	[M]
P3	RPFX0012	MIRAMAT BAG	[M]
		ACCESSORIES	
A1	EUR7623XD0	REMOTE CONTROL	[M]
A1-1	UR75EC0103D	R/C BATTERY COVER	[M]
A2	RJA0065-1D	AC CORD	[M] ⚠
A3	RQT7089-P	O/I BOOK (En)	[M]
A4	RSA0006-J	FM ANTENNA	[M]
A5	RSA0012	AM LOOP ANTENNA	[M]
A6	RJL1P016B15A	VIDEO CABLE	[M]
A9	RFA0631A-K	LEG RUBBER (SPEAKER)	[M]

22.5. Packaging



FLE0306D/K/J/E/A/L